DOCUMENT RESUME

ED 365 688 TM 020 834

TITLE	The North Carolina 1993 Scholastic Aptitude Test Report. Reporting on the Nation, the State, the 120 Public School Systems and 2 Special Public Schools.
INSTITUTION	North Carolina State Dept. of Public Instruction, Raleigh. Div. of Accountability Services/Research.
PUB DATE	Aug 93
NOTE	70p.
PUB TYPE	Statistical Data (110) -- Reports - Descriptive (141)
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	College Bound Students; *College Entrance Examinations; Comparative Testing; *Educational Improvement; Educational Trends; Graphs; High Schools; *High School Students; National Norms; Profiles; School Districts; *Scores; State Surveys; Tables (Data); *Test Results; Trend Analysis
IDENTIFIERS	*North Carolina; *Scholastic Aptitude Test

ABSTRACT

In 1989, North Carolina's average Scholastic Aptitude Test (SAT) score dropped to the lowest in the nation, triggering an intensive effort to improve average SAT scores. In 1993, North Carolina achieved its highest average SAT score ever, as well as the highest percentage of graduating seniors taking the SAT. Scores improved for the 4th consecutive year, but remained below the Southeast average and the national average. Continued improvement will be necessary to meet the targets set by the state for 1995 and 2000. Data in this report come from SAT profiles and figures issued by the College Board. The report is divided into four sections. Section 1 presents 1993 and historical data for the nation, concentrating on the 24 states in which at least 40 percent of the seniors take the SAT. Section 2 emphasizes North Carolina's performance on the SAT, and Section 3 presents the performance of certain groups of students compared with the same categories in other states. Individual school system results are presented in Section 4. Section 4 also introduces the yield index, an index that permits state and school comparisons. Nineteen tables and 22 figures present SAT results for North Carolina students. (SLD)

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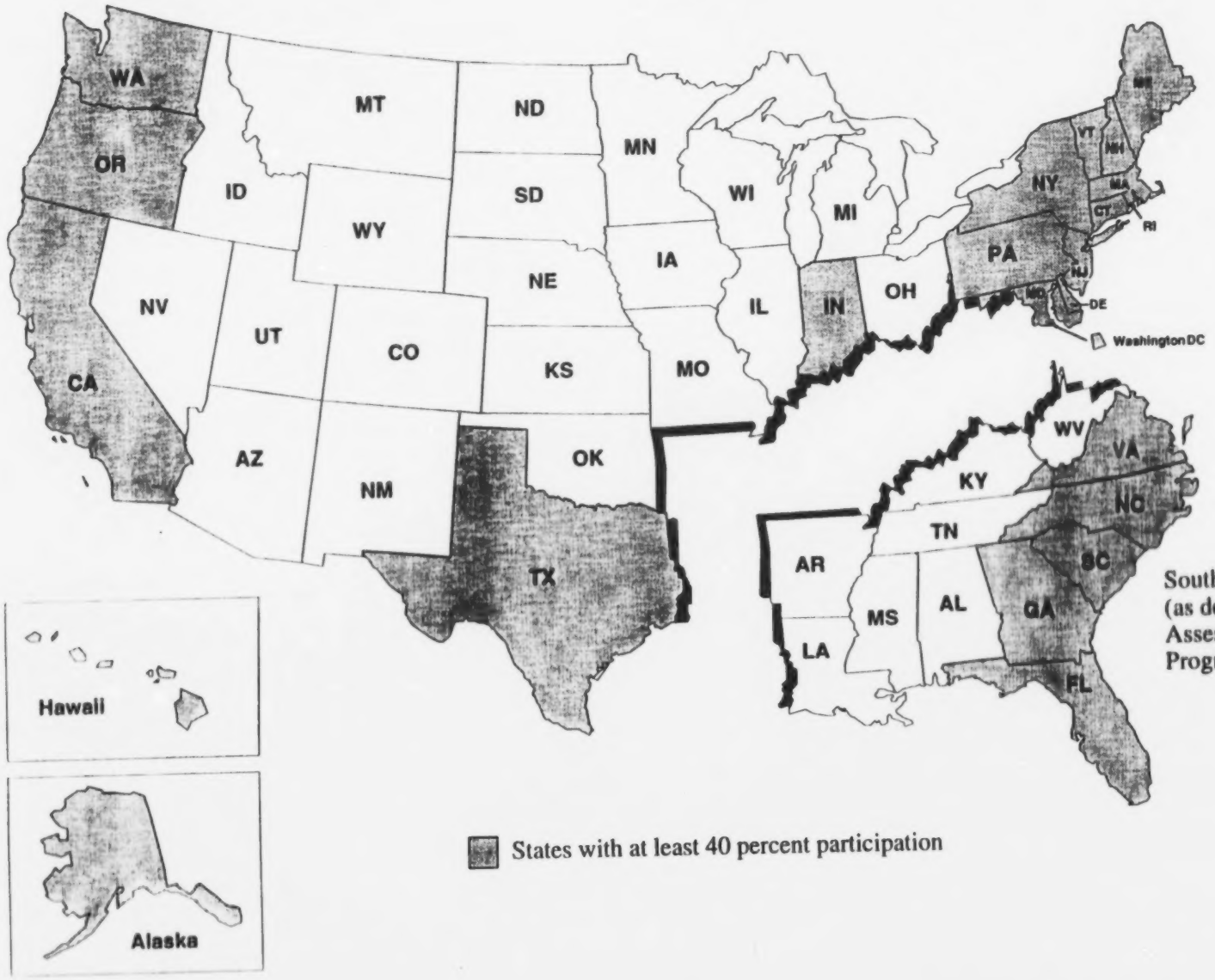
States with at Least 40 Percent Participation on the SAT



Southeast Region
(as defined by National Assessment of Educational Progress, or NAEP)

States with at least 40 percent participation

The North Carolina 1993 Scholastic Aptitude Test Report

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Raleigh, NC 27601

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Published August 1993

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Foreword

This year marks the fourth year of our efforts to move North Carolina's average Scholastic Aptitude Test (SAT) score from the very bottom of the national SAT ranking. Although we still have a long way to go to achieve our goals, the steps we have taken during the last few years to improve SAT scores are paying off. For the fourth year in a row, the average SAT score for our students exceeded the state's average for the previous year. This year, for the first time, the percentage of North Carolina students taking the SAT increased to sixty percent. This means that more of our students feel that they are sufficiently prepared to pursue college.

I believe our efforts to improve SAT scores are paying off for three primary reasons: (1) We have become firmly focused on clearly stated goals; (2) we have set high expectations for our schools and our students; and (3) we have committed ourselves and our resources to achieving agreed-upon goals. If we are careful to maintain the same focus, expectations, and commitment that have been demonstrated during the past four years, there is every reason to believe that *all* of our targets and goals are achievable.

Before you study the results outlined in the content and tables of this report, I recommend that you review the Introduction for a brief summary of where we have been, where we want to go, and for highlights about this year's report of 1993 results.

Four years of successful efforts are behind us and there are many individuals and groups to thank and commend for their help: state and local educational policy makers and leaders, the media, school superintendents, principals, and especially those who most significantly influence our state's students - parents and teachers.

With significantly more of our graduating seniors taking the SAT and with continuing improvement in our scores, it is clear to me that our students and their teachers have accepted the challenge of meeting the goals we have set for 1995 and 2000.

Bob Etheridge
State Superintendent of Public Instruction

Acknowledgments

The development of a comprehensive report on student and school system performance on the Scholastic Aptitude Test requires the effort of many individuals. Special thanks go to Kevin Kirby for his work on several earlier SAT reports. We would also like to thank Joy Gusman for reworking the structure of this report and graphical presentation of the data, Denise Hamm de Estrada for proofreading and insuring the accuracy of the data, and Faye Atkinson and Karen Davis for report production.

Highlights of the 1993 report

- This 1993 report is the fourth annual report of North Carolina SAT results since special state reporting began in 1990.
- This is the second year that all SAT-takers previously had the opportunity to take the PSAT at state expense, when the special North Carolina administration of the PSAT began in 1989-90.

Highlights of 1993 test results

- In 1993, North Carolina students made a 4-point gain from the previous year.
- The North Carolina participation rate on the SAT increased 3 percentage points.
- Since 1989, North Carolina is the only SAT state to have four consecutive years of improvement.
- Nationally the total SAT score has improved for the second consecutive year.

SAT '93

Past performance and future goals

In 1989, North Carolina's average SAT score dropped to the lowest in the nation. Beginning in 1989, teachers, principals, superintendents, educational policy makers and parents have focused on improving the quality of education in North Carolina schools. As a result, gains in the state's average SAT scores have occurred every year since 1989.

This year North Carolina achieved its highest average SAT score ever, as well as its highest ever percentage of graduating seniors taking the SAT. For the fourth consecutive year, North Carolina has improved its SAT score. However, the score remains below the southeast average and the national average. Likewise, almost all subgroups of North Carolina students continue to have lower scores than their national counterparts.

Continued improvement will be necessary to meet the following SAT targets, set by the state for 1995 and 2000:

- By 1995, the average score of North Carolina students taking the SAT will exceed the southeast regional average.
- By 2000, the average score of North Carolina students taking the SAT will exceed the national average.
- Each year between 1990 and 2000, the percentage of North Carolina students taking the SAT will remain at least at the 1989 level.

Clearly, continued improvements in North Carolina will be necessary if these goals are to be met.

Steps taken toward improved SAT scores

Since taking office, State Superintendent Bob Etheridge has supported a comprehensive program to strengthen the state's secondary education program. This program is aimed toward improving overall student achievement, which includes raising SAT scores. A number of ongoing school improvement efforts such as the Basic Education Program and significant changes in the state's Standard Course of Study have created an environment for improved student performance. Features of the program are outlined below.

- North Carolina special reporting of SAT results. Special state reporting of SAT results was begun to provide a thorough analysis of student performance on the SAT and to provide more information to local school systems to assist them in improving SAT scores in their schools. (This 1993 report is the fourth annual report of North Carolina SAT results since special state reporting began.)
- Programs to encourage more rigorous courses of study. Revisions to the state's Standard Course of Study were initiated to strengthen the curriculum. The revised curriculum is in line with national standards, and has an increased emphasis on higher level thinking skills.
- Expansion of the End-of-Grade and End-of-Course Testing Programs. Revisions to the state curriculum impacted the state's testing program, which is specifically designed to assess that curriculum. These changes have resulted in comprehensive end-of-grade tests in grades 3 through 8 as

well as more challenging high school end-of-course tests.

- Expanded participation in the Preliminary Scholastic Aptitude Test (PSAT). The state began offering the PSAT to all public school students who have completed Algebra I, so that more students could become comfortable with the format and content of the SAT before taking it.

- Expansion in data analysis and reporting capabilities. Through work begun with the PSAT Program, Data Analyst software has been developed for each of the testing programs. This user-friendly software allows easy access to individual student data as well as custom summary reporting for subgroups of students.

- Performance-Based Accountability Program. Initiated by legislation (the School Improvement and Accountability Act), this program combines added flexibility in the local use of state educational funds with increased local accountability for student performance.

- State and school system Report Cards. Tied to the Performance-Based Accountability Program, these reports allow parents and other citizens to look at strong and weak points of a school system or the state.

- State support for Advanced Placement (AP) courses. For the first time in 1993-94, the state will support student participation in AP courses in every school system. AP courses are rigorous courses which provide an opportunity for high school students to study college-level material and potentially earn college course credit.

All of these efforts are helping North Carolina move closer to the goals and targets set by the state's policy makers and leaders. Commitment to these efforts continues to be a strong factor not only in promoting improved performance on the SAT but in promoting higher achievement on every measure currently used to assess student performance.

Sources of data for the report

The data in this report are from three primary sources: (1) *National College-Bound Seniors: 1993 SAT Profile*, and profiles from earlier years (The College Board), (2) *North Carolina College-Bound Seniors: 1993 SAT Profile*, as well as the profiles for other selected states (The College Board), and (3) a data tape of individual student scores for the state's 120 public school systems and two special public schools, prepared by Educational Testing Service in cooperation with The College Board. SAT scores are reported each year for students who were scheduled to graduate. The most recent scores of these students are reported, regardless of when they last took the test.

Data from the College Board vary somewhat from data reported to the Department of Public Instruction, since the Department of Public Instruction data were restricted to the 120 public school systems and two special public schools, while the College Board profiles included students from all non-public schools as well. In the several instances where the Department of Public Instruction data were aggregated for the state and differ from the College Board data, care has been taken to identify the data source in order to avoid confusion.

How the report is presented

This report is broken into four sections with most containing a mix of tables, figures and observations or comments. **Section I** presents 1993 and historical data for the fifty states and the District of Columbia. Other tables in Section I concentrate on the 24 states where at least 40 percent of seniors take the SAT. These 24 states are known as the SAT

states and are identified on the inside front cover. **Section II** emphasizes North Carolina's performance on the SAT compared to the nation's performance. **Section III** presents the 1993 performance of certain categories of students in North Carolina compared to the performance of the same categories of students in Florida, Georgia, New York, South Carolina, Texas and Virginia. These states were selected either because they are southeastern states or states whose general population characteristics are similar to North Carolina's. Individual school system results for 1993 are presented in **Section IV**.

The Yield Index

The yield index is introduced in **Section IV**. Yield is based on both the average percent correct on the test (or a section of the test), and how many students out of the total group take the test (participation rate). First, the participation rate is calculated by dividing the number of twelfth-grade students who took the SAT by the seventh-month average daily membership. Percent correct on each section is the percent of total possible section score that was achieved. For example, a score of 400 on the verbal section is 200 on a 600 point scale, since the lowest possible score for each section is 200 and the highest score is 800. The participation rate is then multiplied by the verbal percentage to arrive at the verbal yield score. For example, a school system with an average verbal score of 528 and a participation rate of 50 percent has a verbal yield score of 27 = [((528 - 200)/600) x 50]. The index theoretically ranges from zero to 100.

This yield index permits the state, a school system or a school to compare its performance from year to year on a scale adjusted for varying participation rates. Using data from all of the public schools, the state's 1993 verbal yield was 20.6, up from the 1992 verbal yield of 18.2, and the mathematics yield was 25.3, also up from the 1992 mathematics yield of 22.4.

School and School System Profiles

Individual school and school system profiles, similar in format to the state profile presented as Tables 10 and 11, were provided to each of the school systems or schools. A compilation of the school system profiles is available from the Department of Public Instruction. Graphical presentations of school system trends in performance (from 1989 to 1993), and school system frequency distributions were also provided to school systems.

Note that earlier reports in North Carolina's SAT performance were released and are available through the Department of Public Instruction. They are as follows:

North Carolina Scholastic Aptitude Test Results: State and 126 School System Reports, 1990, (in two volumes).

The North Carolina 1991 Scholastic Aptitude Test Report: State, 129 Public School System and 2 Special School Reports, 1991.

The North Carolina 1992 Scholastic Aptitude Test Report: State, the 129 Public School Systems and 2 Special Schools, 1992.

Comparing the Performance of

The Fifty States

1993 and Historically

This section presents 1993 and historical data for the fifty states and the District of Columbia. Some tables only compare the 24 SAT states, where at least 40 percent of seniors take the SAT. In those states where very small percentages of students take the test, the students are typically applicants to the nation's most selective colleges, so that average scores for these states are generally higher than the national average. In the SAT states where greater proportions of students take the test, the scores are closer to the national average. For this reason, caution must be used when comparing states. Since ranking states on the basis of SAT scores alone fails to take into account a number of important factors, including participation, a method for 'correcting' a state's SAT score for percent tested has been used. A regression of average score against a function of percent tested determined the coefficients used to adjust scores and ranks for participation (by estimating the number of score points a state generally decreases for one point increase in percent tested.)

Table 1. 1993 SAT Verbal, Mathematics, and Total Scores Ranked by State

State	Percent Tested	Verbal Mean	Verbal Rank	Math Mean	Math Rank	Total Mean	Total Rank
Alabama	9	480	13	526	15	1006	14
Alaska	42	438	29	477	34	915	31
Arizona	28	444	25	497	25	941	25
Arkansas	6	478	15	519	19	997	18
California	47	415	44	484	31	899	35
Colorado	28	454	23	509	21	963	23
Connecticut	88	430	33	474	36	904	33
Delaware	68	429	34	465	43	894	36
District of Columbia	76	405	48	441	51	846	49
Florida	52	416	42	466	42	882	44
Georgia	65	399	50	445	49	844	50
Hawaii	56	401	49	478	32	879	45
Idaho	18	465	20	507	22	972	21
Illinois	15	475	18	541	9	1016	10
Indiana	61	409	46	460	46	869	47
Iowa	5	520	1	583	1	1103	1
Kansas	9	494	5	548	7	1042	6
Kentucky	11	476	17	522	17	998	17
Louisiana	9	481	10	527	14	1008	13
Maine	69	422	38	463	45	885	41
Maryland	66	431	32	478	32	909	32
Massachusetts	81	427	35	476	35	903	34
Michigan	11	468	19	528	13	996	19
Minnesota	10	489	6	556	4	1045	5
Mississippi	4	481	10	521	18	1002	16
Missouri	11	481	10	532	10	1013	11
Montana	24	459	22	516	20	975	20
Nebraska	10	479	14	544	8	1023	8
Nevada	28	432	31	488	27	920	30
New Hampshire	78	442	26	487	28	929	27
New Jersey	76	419	39	473	37	892	39
New Mexico	11	478	15	525	16	1003	15
New York	74	416	42	471	39	887	40
North Carolina	60	406	47	453	48	859	48
North Dakota	6	518	2	583	1	1101	2
Ohio	22	454	23	505	24	959	24
Oklahoma	9	482	9	530	12	1012	12
Oregon	56	441	27	492	26	933	26
Pennsylvania	70	418	41	460	46	878	46
Rhode Island	71	419	39	464	44	883	43
South Carolina	61	396	51	442	50	838	51
South Dakota	6	502	3	558	3	1060	3
Tennessee	13	486	7	531	11	1017	9
Texas	45	413	45	472	38	885	41
Utah	4	500	4	549	6	1049	4
Vermont	68	426	36	467	41	893	38
Virginia	63	425	37	469	40	894	36
Washington	52	435	30	486	29	921	29
West Virginia	17	439	28	485	30	924	28
Wisconsin	10	485	8	551	5	1036	7
Wyoming	13	463	21	507	22	970	22

Observations for Table 1:

- North Carolina scored 859 on the Total SAT in 1993: 406 on the verbal section and 453 on the mathematics section.
- An estimated 60 percent of North Carolina seniors took the SAT in 1993, which is 3 percent more than took the test in 1992.
- North Carolina ranked 48th on total SAT score, ranking above Georgia, South Carolina and the District of Colombia; ranked 47th on verbal score, ranking above the District of Columbia, Georgia, South Carolina and Hawaii; and ranked 48th on mathematics, ranking above Georgia, South Carolina and the District of Columbia.

Observations for Table 2:

- North Carolina improved its total SAT score by four points over the previous year, improving its mathematics score by three points and its verbal score by one point.
- North Carolina's highest rank since 1988 was the 1991, 1992 and 1993 rank of 48.
- North Carolina's total score remained 48th for the 3rd consecutive year but moved closer to the 47th position.

Table 2. 1988-1993 Total SAT Scores Ranked by State

State	1988 Total	Rank	1989 Total	Rank	1990 Total	Rank	1991 Total	Rank	1992 Total	Rank	1993 Total	Rank	1993 Percent Tested
Alabama	1000	14	1002	11	984	18	991	18	996	14	1006	14	9
Alaska	916	31	923	31	914	31	920	29	908	31	915	31	42
Arizona	955	24	952	24	942	25	932	25	933	25	941	25	28
Arkansas	995	16	986	17	981	19	1005	11	990	17	997	18	6
California	908	33	906	34	903	33	897	33	900	34	899	35	47
Colorado	971	21	966	22	969	21	959	23	960	23	963	23	28
Connecticut	908	33	908	33	901	35	897	33	900	34	904	33	88
Delaware	899	39	903	37	903	33	892	36	895	37	894	36	68
District of Columbia	839	50	846	49	850	48	840	50	842	49	846	49	76
Florida	890	42	887	44	884	42	882	41	884	40	882	44	52
Georgia	848	48	847	48	844	49	844	48	842	49	844	50	65
Hawaii	888	44	888	43	885	41	883	40	878	44	879	45	56
Idaho	968	23	965	23	968	22	968	22	963	22	972	21	18
Illinois	984	20	982	19	994	14	1006	10	1010	10	1016	10	15
Indiana	870	47	871	47	867	47	865	47	868	47	869	47	61
Iowa	1090	1	1084	1	1088	1	1093	1	1096	1	1103	1	5
Kansas	1035	4	1040	4	1040	4	1039	4	1033	6	1042	6	9
Kentucky	990	17	996	13	994	14	993	17	988	18	998	17	11
Louisiana	989	19	986	17	993	16	994	16	991	16	1008	13	9
Maine	896	40	897	39	886	40	879	44	882	41	885	41	69
Maryland	908	33	914	32	908	32	904	32	907	32	909	32	66
Massachusetts	906	36	905	35	900	36	896	35	902	33	903	34	81
Michigan	970	22	972	21	968	22	980	20	987	20	996	19	11
Minnesota	1001	11	1006	10	1019	7	1023	7	1053	3	1045	5	10
Mississippi	1001	11	988	16	996	12	997	13	1004	12	1002	16	4
Missouri	990	17	989	15	995	13	1002	12	1004	12	1013	11	11
Montana	1000	14	992	14	987	17	982	19	988	18	975	20	24
Nebraska	1032	6	1030	6	1030	6	1024	6	1018	8	1023	8	10
Nevada	926	29	926	30	921	30	919	30	922	29	920	30	28
New Hampshire	933	28	932	28	928	27	921	28	923	28	929	27	78
New Jersey	893	41	894	41	891	39	886	39	891	39	892	39	76
New Mexico	1002	10	1015	7	1007	10	996	15	996	14	1003	15	11
New York	889	43	890	42	882	45	881	42	882	41	887	40	74
North Carolina	841	49	836	51	841	50	844	48	855	48	859	48	60
North Dakota	1053	3	1067	2	1069	2	1073	2	1068	2	1101	2	6
Ohio	951	25	948	25	949	24	946	24	951	24	959	24	22
Oklahoma	1005	9	1001	12	1001	11	997	13	1007	11	1012	12	9
Oregon	923	30	927	29	923	28	922	27	925	26	933	26	56
Pennsylvania	886	45	886	45	883	43	876	45	877	45	878	46	70
Rhode Island	900	38	895	40	883	43	880	43	881	43	883	43	71
South Carolina	838	51	838	50	834	51	832	51	831	51	838	51	61
South Dakota	1070	2	1041	3	1061	3	1047	3	1040	5	1060	3	6
Tennessee	1009	7	1009	9	1008	9	1015	9	1013	9	1017	9	13
Texas	879	46	877	46	874	46	874	46	876	46	885	41	45
Utah	1034	5	1036	5	1031	5	1031	5	1041	4	1049	4	4
Vermont	909	32	905	35	897	37	890	37	897	36	893	38	68
Virginia	902	37	902	38	895	38	890	37	893	38	894	36	63
Washington	942	27	939	26	923	28	913	31	916	30	921	29	52
West Virginia	947	26	939	26	933	26	926	26	924	27	924	28	17
Wisconsin	1007	8	1013	8	1019	7	1023	7	1029	7	1036	7	10
Wyoming	1001	11	978	20	977	20	980	20	978	21	970	22	13

Table 3. 1993 SAT Verbal, Mathematics, and Total Scores for States with 40 Percent or More of Seniors Taking the Test

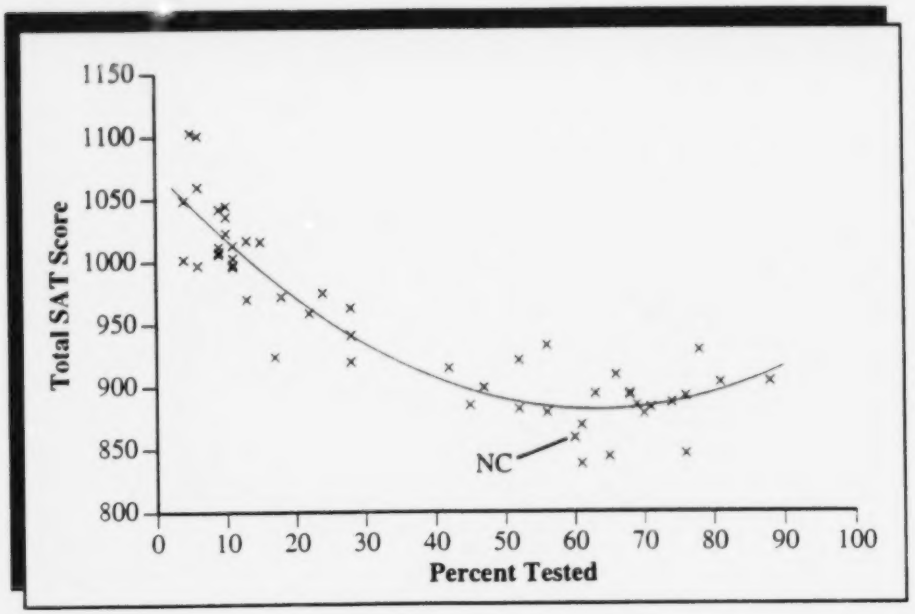
State	Percent Tested	Verbal Mean	Verbal Rank	Math Mean	Math Rank	Total Mean	Total Rank
Alaska	42	438	3	477	7	915	4
California	47	415	17	484	4	899	8
Connecticut	88	430	6	474	9	904	6
Delaware	68	429	7	465	16	894	9
District of Columbia	76	405	21	441	24	846	22
Florida	52	416	15	466	15	882	17
Georgia	65	399	23	445	22	844	23
Hawaii	56	401	22	478	5	879	18
Indiana	61	409	19	460	19	869	20
Maine	69	422	11	463	18	885	14
Maryland	66	431	5	478	5	909	5
Massachusetts	81	427	8	476	8	903	7
New Hampshire	78	442	1	487	2	929	2
New Jersey	76	419	12	473	10	892	12
New York	74	416	15	471	12	887	13
North Carolina	60	406	20	453	21	859	21
Oregon	56	441	2	492	1	933	1
Pennsylvania	70	418	14	460	19	878	19
Rhode Island	71	419	12	464	17	883	16
South Carolina	61	396	24	442	23	838	24
Texas	45	413	18	472	11	885	14
Vermont	68	426	9	467	14	893	11
Virginia	63	425	10	469	13	894	9
Washington	52	435	4	486	3	921	3

Observations for Table 3:

- Twenty-four states administered the SAT to 40 percent or more of seniors in 1993 (see inside front cover.) The percentage of students taking the SAT ranged from 42 percent in Alaska to 88 percent in Connecticut. Sixty percent of North Carolina seniors were tested, an increase of 3 percentage points from 1992.

- Sixteen states had higher percentages of students tested than North Carolina.

Figure 1. Scatterplot of Total SAT Score by Percent of Students Tested for all States



Observations for Figure 1 and Table 4:

- Generally, as states increase their SAT participation rate, their average score decreases.
- With an adjustment for percent tested, North Carolina's rank improves to 44.

Note: The line in Figure 1 represents a states expected score, a statistic that is based only on percent tested and does not account for other variations in student populations. States above this line are scoring better than expected while states below this line are scoring lower than expected. A state's residual is the difference between their actual and expected scores.

Data Source: Table 4.

Table 4. 1993 Percent Tested, SAT Scores, and Adjusted Total SAT Scores and Ranks Adjusted for Percent Tested

State	Percent Tested	Total Mean	Total Rank	Expected Score	Residual	Residual Rank
Alabama	9	1006	14	1023	-17.2	42
Alaska	42	915	31	903	12.1	16
Arizona	28	941	25	941	0.0	26
Arkansas	6	997	18	1039	-42.3	47
California	47	899	35	894	5.2	20
Colorado	28	963	23	941	22.0	9
Connecticut	88	904	33	911	-7.1	33
Delaware	68	894	36	882	11.7	17
District of Columbia	76	846	49	889	-43.2	48
Florida	52	882	44	887	-5.2	31
Georgia	65	844	50	881	-37.4	46
Hawaii	56	879	45	884	-4.7	30
Idaho	18	972	21	980	-7.9	34
Illinois	15	1016	10	993	22.6	8
Indiana	61	869	47	881	-12.4	38
Iowa	5	1103	1	1045	58.1	2
Kansas	9	1042	6	1023	18.8	12
Kentucky	11	998	17	1013	-14.9	39
Louisiana	9	1008	13	1023	-15.2	40
Maine	69	885	41	883	2.1	23
Maryland	66	909	32	882	27.4	6
Massachusetts	81	903	34	897	6.4	19
Michigan	11	996	19	1013	-16.9	41
Minnesota	10	1045	5	1018	27.0	7
Mississippi	4	1002	16	1051	-48.6	50
Missouri	11	1013	11	1013	0.1	24
Montana	24	975	20	955	19.6	11
Nebraska	10	1023	8	1018	5.0	21
Nevada	28	920	30	941	-21.0	43
New Hampshire	78	929	27	892	37.1	4
New Jersey	76	892	39	889	2.8	22
New Mexico	11	1003	15	1013	-9.9	35
New York	74	887	40	887	0.1	24
North Carolina	60	859	48	882	-22.7	44
North Dakota	6	1101	2	1039	61.7	1
Ohio	22	959	24	963	-4.2	29
Oklahoma	9	1012	12	1023	-11.2	36
Oregon	56	933	26	884	49.3	3
Pennsylvania	70	878	46	883	-5.5	32
Rhode Island	71	883	43	884	-1.2	27
South Carolina	61	838	51	881	-43.4	49
South Dakota	6	1060	3	1039	20.7	10
Tennessee	13	1017	9	1003	14.0	14
Texas	45	885	41	897	-12.2	37
Utah	4	1049	4	1051	-1.6	28
Vermont	68	893	38	882	10.7	18
Virginia	63	894	36	881	12.8	15
Washington	52	921	29	887	33.8	5
West Virginia	17	924	28	984	-60.3	51
Wisconsin	10	1036	7	1018	18.0	13
Wyoming	13	970	22	1003	-33.0	45

Table 5. Yearly Changes and Overall Change in Total SAT Score from 1989 to 1993 for States with 40 Percent or More Seniors Taking the Test

State	1993 Total	Change from 1992 to 1993	Change from 1991 to 1992	Change from 1990 to 1991	Change from 1989 to1990	Change from 1989 to 1993
Alaska	915	7	-12	6	-9	-8
California	899	-1	3	-6	-3	-7
Connecticut	904	4	3	-4	-7	-4
Delaware	894	-1	3	-11	0	-9
District of Columbia	846	4	2	-10	4	0
Florida	882	-2	2	-2	-3	-5
Georgia	844	2	-2	0	-3	-3
Hawaii	879	1	-5	-2	-3	-9
Indiana	869	1	3	-2	-4	-2
Maine	885	3	3	-7	-11	-12
Maryland	909	2	3	-4	-6	-5
Massachusetts	903	1	6	-4	-5	-2
New Hampshire	929	6	2	-7	-4	-3
New Jersey	892	1	5	-5	-3	-2
New York	887	5	1	-1	-8	-3
North Carolina	859	4	11	3	5	23
Oregon	933	8	3	-1	-4	6
Pennsylvania	878	1	1	-7	-3	-8
Rhode Island	883	2	1	-3	-12	-12
South Carolina	838	7	-1	-2	-4	0
Texas	885	9	2	0	-3	8
Vermont	893	-4	7	-7	-8	-12
Virginia	894	1	3	-5	-7	-8
Washington	921	5	3	-10	-16	-18

Observations for Table 5:

- North Carolina improved its total SAT score by 4 points in 1993. This is the 8th highest gain among the SAT states.
- North Carolina had a two year improvement of 15 points, which is the highest among the SAT states and a three year improvement of 18 points, the highest among the SAT states.
- North Carolina is the only SAT state with four consecutive years of improvement in total SAT score. The four year increase of 23 far exceeds thta of any other SAT state.

Comparing the Performance of

North Carolina and the Nation

1993 and Historically

This section contains four smaller sections: North Carolina and the United State's SAT scores since 1972; a frequency distribution of North Carolina's student scores; a graphical representation of the distribution of scores; and a comparison of student performance with scores disaggregated for selected categories of students (trend data is shown for the past six years.)

Table 6. Average Total SAT Scores for North Carolina and the United States: 1972-1993*

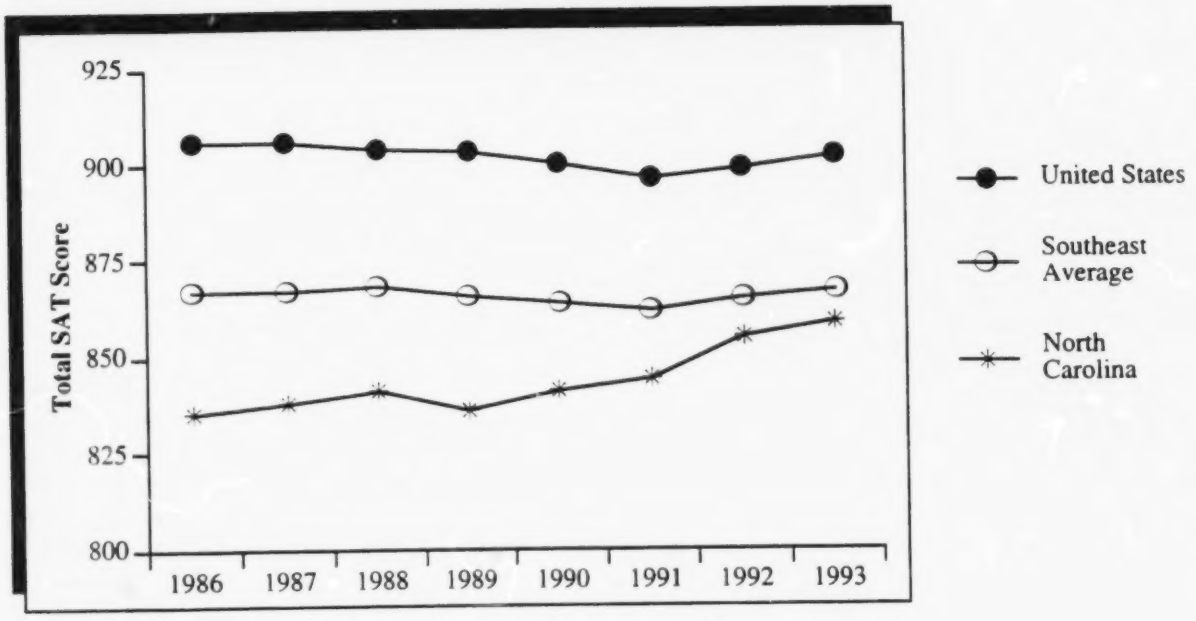
	National Average			North Carolina Average		
Year	Verbal	Math	Total	Verbal	Math	Total
1972	453	484	937	411	438	849
1973	445	481	926	408	439	847
1974	444	480	924	409	437	846
1975	434	472	906	399	428	827
1976	431	472	903	396	423	819
1977	429	470	899	394	425	819
1978	429	468	897	390	424	814
1979	427	467	894	393	426	819
1980	424	466	890	393	429	822
1981	424	466	890	391	427	818
1982	426	467	893	396	431	827
1983	425	468	893	394	431	825
1984	426	471	897	395	432	827
1985	431	475	906	398	435	833
1986	431	475	906	399	436	835
1987	430	476	906	400	438	838
1988	428	476	904	401	440	841
1989	427	476	903	397	439	836
1990	424	476	900	401	440	841
1991	422	474	896	400	444	844
1992	423	476	899	405	450	855
1993	424	478	902	406	453	859

*1972 was the first year that the College Board began reporting the most recent SAT scores of seniors, regardless of when the student last took the test. Data prior to that time are not comparable.

Observations for Table 6:

- The national average improved for the second consecutive year with the verbal and mathematics scores increasing to 424 and 478 respectively.
- In 1993 North Carolina's average total and mathematics scores were the highest achieved since 1972 (which was the first year the College Board reported the most recent scores of seniors), and the verbal score was the highest since 1974.
- In the last ten years North Carolina has slowly been closing the gap between their average and the national average in both the verbal and mathematics sections.
- Currently, the United States average is 18 points above the North Carolina average for verbal and 25 points higher than the North Carolina average for mathematics.

Figure 2. Average Total SAT Scores for the United States, the Southeast Region and North Carolina: 1986–1993



Observations:

- In 1993 North Carolina's average total scores were the highest achieved since 1972 (which was the first year the College Board reported the most recent scores of seniors.)

- The trend line for the United States from 1985 to 1993 shows that the United States was on a downward trend from 1986 to 1991, and slightly up in 1992 and 1993. The trend line for North Carolina has generally been up since 1986. North Carolina has improved upon their score from the previous year in nine of the last ten years, while gaining an average of a little more than 3 points per year over this period.

Data Source: Tables 2 and 6.

Table 7. Frequency Distributions of North Carolina 1993 SAT Verbal and Mathematics Scores

Verbal (Mean = 406, Yield = 20.6)				Mathematics (Mean = 453, Yield = 25.3)		
Number	Percent	N. C. Percentile	Score	Number	Percent	N. C. Percentile
1	0.00	99	800	20	0.06	99
0	0.00	99	790	39	0.12	99
7	0.02	99	780	31	0.09	99
0	0.00	99	770	39	0.12	99
12	0.04	99	760	73	0.22	99
10	0.03	99	750	62	0.18	99
21	0.06	99	740	123	0.36	99
46	0.14	99	730	103	0.30	99
40	0.12	99	720	100	0.30	98
61	0.18	99	710	127	0.38	98
39	0.12	99	700	159	0.47	98
94	0.28	99	690	184	0.54	97
99	0.29	99	680	222	0.66	97
82	0.24	99	670	104	0.31	96
85	0.25	98	660	272	0.81	96
120	0.36	98	650	303	0.90	95
140	0.41	98	640	311	0.92	94
210	0.62	97	630	360	1.07	93
149	0.44	97	620	393	1.16	92
189	0.56	96	610	461	1.36	90
315	0.93	95	600	463	1.37	89
214	0.63	95	590	509	1.51	88
237	0.70	94	580	549	1.63	86
405	1.20	93	570	628	1.86	84
282	0.83	92	560	668	1.98	82
477	1.41	91	550	781	2.31	80
396	1.17	90	540	747	2.21	78
587	1.74	88	530	805	2.38	76
711	2.10	86	520	873	2.58	73
560	1.66	84	510	1435	4.25	70
827	2.45	82	500	1013	3.00	66
625	1.85	80	490	1022	3.03	63
990	2.93	78	480	1075	3.18	60
1163	3.44	75	470	1106	3.27	57
837	2.48	72	460	1000	2.96	54
1176	3.48	69	450	1033	3.06	51
935	2.77	65	440	1016	3.01	48
1323	3.92	62	430	1156	3.42	44
1149	3.40	58	420	1037	3.07	41
1370	4.06	55	410	1045	3.09	38
1566	4.64	50	400	1029	3.05	35
941	2.79	47	390	1099	3.25	32
1434	4.24	43	380	1022	3.03	29
1216	3.60	39	370	935	2.77	26
1366	4.04	35	360	889	2.63	23
1124	3.33	32	350	875	2.59	20
937	2.77	29	340	815	2.41	18
1443	4.27	25	330	834	2.47	16
711	2.10	22	320	719	2.13	13
1258	3.72	19	310	998	2.95	11
803	2.38	16	300	580	1.72	8
673	1.99	14	290	549	1.63	7
912	2.70	11	280	429	1.27	5
554	1.64	9	270	418	1.24	4
553	1.64	8	260	351	1.04	3
561	1.66	6	250	260	0.77	2
407	1.20	5	240	199	0.59	1
256	0.76	4	230	133	0.39	1
320	0.95	3	220	70	0.21	1
208	0.62	2	210	61	0.18	1
554	1.64	1	200	69	0.20	1

Note: Data are from the 120 Public School Systems and 2 Special Schools.

Figure 3. Distribution of North Carolina 1993 Individual SAT Verbal Scores

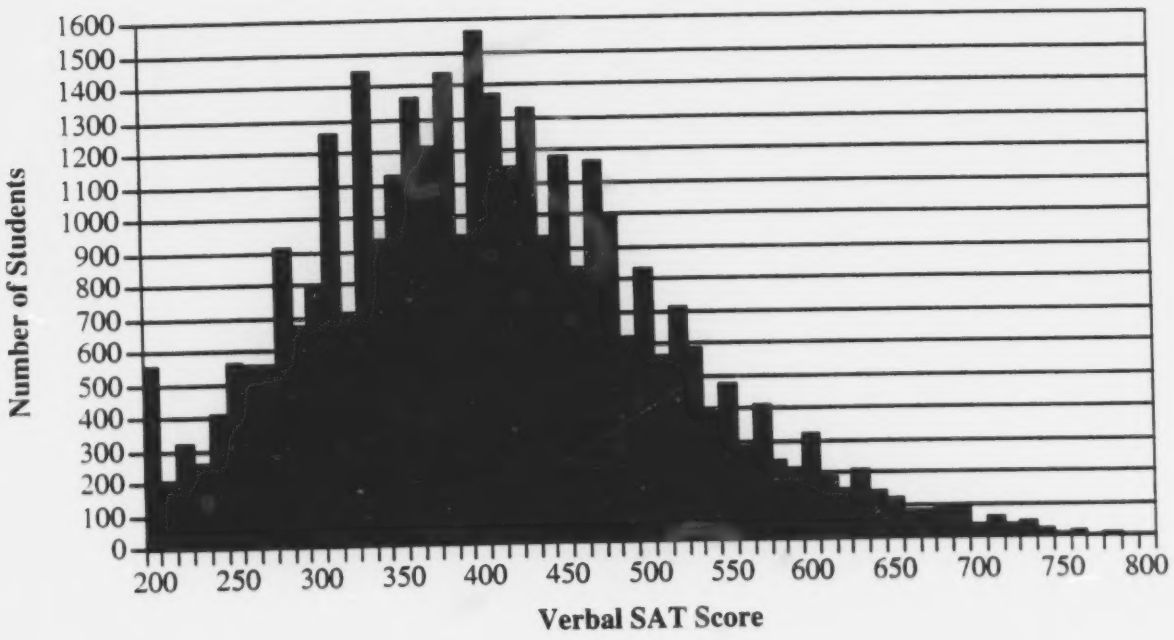
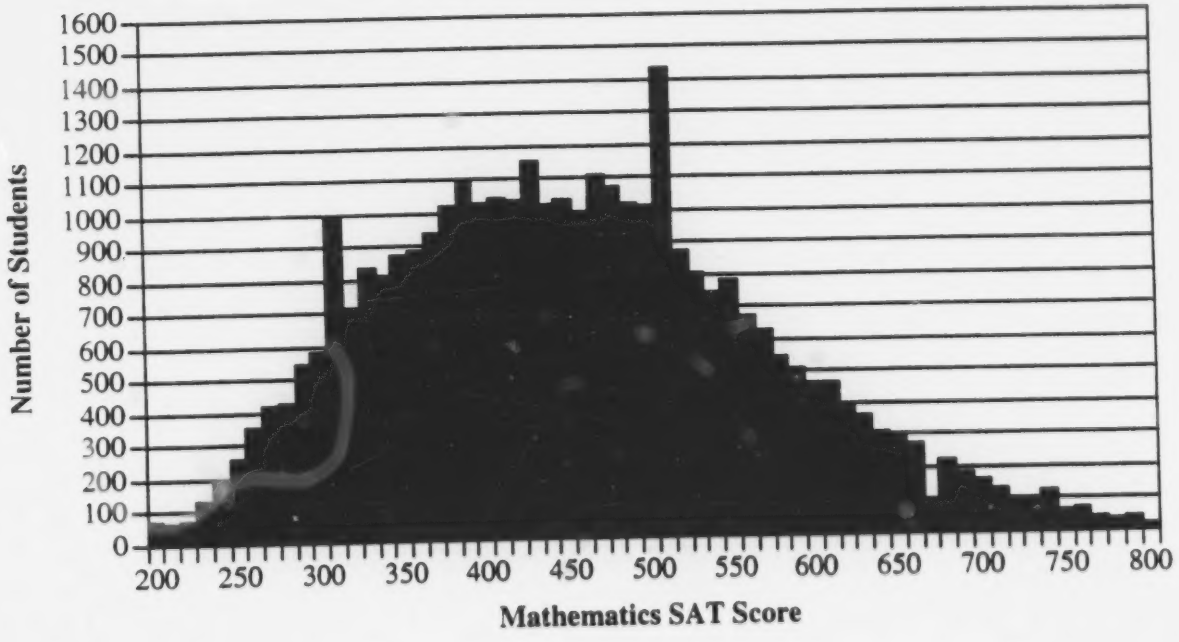


Figure 4. Distribution of North Carolina 1993 Individual SAT Mathematics Scores



Note: Data are from the 120 Public School Systems and 2 special schools.

Table 8. Total Score Breakdown: North Carolina and the United States

	North Carolina			United States		Difference from U.S.
	N	Average	%	Average	%	
All Students	37,155	859	100	902	100	-43
Sex						
Male	16,784	882	45	930	47	-48
Female	20,371	839	55	877	53	-38
Race/Ethnicity						
American Indian	505	775	1	847	1	-72
Asian American	836	920	2	950	8	-30
Black	7,489	722	22	741	11	-19
White	25,267	904	73	938	70	-34
Other	578	869	2	823	10	46
No response	2,480					
Parent Education Level						
No High School Diploma	1,058	729	3	746	5	-17
High School Diploma	15,220	808	44	840	37	-32
Associate Degree	3,374	832	10	865	8	-33
Bachelor's Degree	9,018	909	26	947	27	-38
Graduate Degree	5,903	977	17	1012	24	-35
Family Income						
Less than $10,000	1,705	729	5	768	6	-39
$10,000 - $20,000	4,248	780	13	813	11	-33
$20,000 - $30,000	5,325	825	16	857	14	-32
$30,000 - $40,000	6,113	853	19	887	17	-34
$40,000 - $50,000	4,410	875	14	914	13	-39
$50,000 - $60,000	3,536	900	11	933	11	-33
$60,000 - $70,000	2,248	923	7	953	8	-30
More than $70,000	4,840	970	15	1005	21	-35
No response	4,730					
Total Credits in Six Academic Subjects						
20 or more	9,710	958	33	999	42	-41
19 to 19.5	3,904	898	13	923	13	-25
18 to 18.5	3,946	861	14	883	12	-22
17 to 17.5	3,184	824	11	846	10	-22
16 to 16/5	2,371	787	8	817	8	-30
15 to 15.5	1,913	779	7	802	6	-23
Fewer than 15	4,189	767	14	776	11	-9
No response	7,938					
High School Grade Point Average						
A+ (97-100)	1,837	1126	5	1170	5	-44
A (93-96)	5,102	1014	15	1070	13	-56
A- (90-92)	5,063	933	15	1004	14	-71
B (80-89)	16,867	817	49	866	51	-49
C (70-79)	5,468	714	16	748	17	-34
D or below	148	674	0	717	0	-43
No Responce	2,670					
High School Class Rank						
Top Tenth	6,493	1054	21	1099	21	-45
Second Tenth	6,780	919	22	962	22	-43
Second Fifth	8,793	834	28	878	27	-44
Third Fifth	7,789	747	25	786	24	-39
Fourth Fifth	1,194	688	4	730	4	-42
Bottom Fifth	277	664	1	699	1	-35
No response	5,829					

Table 9. Verbal Score Breakdown: North Carolina and the United States

	North Carolina			United States		Difference from U.S.
	N	Average	%	Average	%	
All Students	37,155	406	100	424	100	-18
Sex						
Male	16,784	409	45	428	47	-19
Female	20,371	403	55	420	53	-17
Race/Ethnicity						
American Indian	505	363	1	400	1	-37
Asian American	836	404	2	415	8	-11
Black	7,489	342	22	353	11	-11
White	25,267	428	73	444	70	-16
Other	578	413	2	386	10	27
No response	2,480					
Parent Education Level						
No High School Diploma	1,058	339	3	338	5	1
High School Diploma	15,220	381	44	395	37	-14
Associate Degree	3,374	394	10	408	8	-14
Bachelor's Degree	9,018	430	26	445	27	-15
Graduate Degree	5,903	465	17	478	24	-13
Family Income						
Less than $10,000	1,705	342	5	352	6	-10
$10,000 - $20,000	4,248	368	13	379	11	-11
$20,000 - $30,000	5,325	390	16	404	14	-14
$30,000 - $40,000	6,113	404	19	418	17	-14
$40,000 - $50,000	4,410	415	14	431	13	-16
$50,000 - $60,000	3,536	425	11	440	11	-15
$60,000 - $70,000	2,248	437	7	449	8	-12
More than $70,000	4,840	456	15	472	21	-16
No response	4,730					0
Total Credits in Six Academic Subjects						
20 or more	9,710	456	33	471	42	-15
19 to 19.5	3,904	424	13	434	13	-10
18 to 18.5	3,946	406	14	415	12	-9
17 to 17.5	3,184	387	11	397	10	-10
16 to 16/5	2,371	370	8	384	8	-14
15 to 15.5	1,913	367	7	377	6	-10
Fewer than 15	4,189	360	14	361	11	-1
No response	7,938					
High School Grade Point Average						
A+ (97-100)	1,837	529	5	547	5	-18
A (93-96)	5,102	478	15	500	13	-22
A- (90-92)	5,063	439	15	469	14	-30
B (80-89)	16,867	387	49	408	51	-21
C (70-79)	5,468	340	16	355	17	-15
D or below	148	324	0	339	0	-15
No Responce	2,670					
High School Class Rank						
Top Tenth	6,493	496	21	513	21	-17
Second Tenth	6,780	432	22	449	22	-17
Second Fifth	8,793	394	28	412	27	-18
Third Fifth	7,789	355	25	373	24	-18
Fourth Fifth	1,194	328	4	350	4	-22
Bottom Fifth	277	320	1	336	1	-16
No response	5,829					

Table 10. Mathematics Score Breakdown: North Carolina and the United States

	North Carolina			United States		Difference from U.S.
	N	Average	%	Average	%	
All Students	37,155	453	100	478	100	-25
Sex						
Male	16,784	473	45	502	47	-29
Female	20,371	436	55	457	53	-21
Race/Ethnicity						
American Indian	505	412	1	447	1	-35
Asian American	836	516	2	535	8	-19
Black	7,489	380	22	388	11	-8
White	25,267	476	73	494	70	-18
Other	578	456	2	437	10	19
No response	2,480					
Parent Education Level						
No High School Diploma	1,058	390	3	408	5	-18
High School Diploma	15,220	427	44	445	37	-18
Associate Degree	3,374	438	10	457	8	-19
Bachelor's Degree	9,018	479	26	502	27	-23
Graduate Degree	5,903	512	17	534	24	-22
Family Income						
Less than $10,000	1,705	387	5	416	6	-29
$10,000 - $20,000	4,248	412	13	434	11	-22
$20,000 - $30,000	5,325	435	16	453	14	-18
$30,000 - $40,000	6,113	449	19	469	17	-20
$40,000 - $50,000	4,410	460	14	483	13	-23
$50,000 - $60,000	3,536	475	11	493	11	-18
$60,000 - $70,000	2,248	486	7	504	8	-18
More than $70,000	4,840	514	15	533	21	-19
No response	4,730					
Total Credits in Six Academic Subjects						
20 or more	9,710	502	33	528	42	-26
19 to 19.5	3,904	474	13	489	13	-15
18 to 18.5	3,946	455	14	468	12	-13
17 to 17.5	3,184	437	11	449	10	-12
16 to 16/5	2,371	417	8	433	8	-16
15 to 15.5	1,913	412	7	425	6	-13
Fewer than 15	4,189	407	14	415	11	-8
No response	7,938					
High School Grade Point Average						
A+ (97-100)	1,837	597	5	623	5	-26
A (93-96)	5,102	536	15	570	13	-34
A- (90-92)	5,063	494	15	535	14	-41
B (80-89)	16,867	430	49	458	51	-28
C (70-79)	5,468	374	16	393	17	-19
D or below	148	350	0	378	0	-28
No Responce	2,670					
High School Class Rank						
Top Tenth	6,493	558	21	586	21	-28
Second Tenth	6,780	487	22	513	22	-26
Second Fifth	8,793	440	28	466	27	-26
Third Fifth	7,789	392	25	413	24	-21
Fourth Fifth	1,194	360	4	380	4	-20
Bottom Fifth	277	344	1	363	1	-19
No response	5,829					

Table 11. United States and North Carolina Total SAT Scores for Categories of Students: 1988–1993

	1988			1989			1990			1991			1992			1993		
	U.S.	N.C.	Diff.	U.S.	N.C.	Diff.	U.S.	N.C.	Diff.	U.S.	N.C.	Diff.	U.S.	N.C.	Diff.	U.S.	N.C.	Diff.
All Students	904	841	63	903	836	67	900	841	59	896	844	52	899	855	44	902	859	43
Sex																		
Male	933	868	65	934	860	74	928	863	65	923	865	58	927	877	50	930	882	48
Female	877	819	58	875	816	59	874	823	51	871	828	43	875	837	38	877	839	38
Race/Ethnicity																		
American Indian	828	765	63	812	768	44	825	769	56	830	764	66	837	764	73	847	775	72
Asian American	930	877	53	934	889	45	938	902	36	941	912	29	945	923	22	950	920	30
Black	737	695	42	737	696	41	737	702	35	736	710	26	737	719	18	741	722	19
White	935	885	50	937	881	56	933	886	47	930	890	40	933	901	32	938	904	34
Other	817	835	-18	821	865	-44	818	852	-34	816	860	-44	819	866	-47	823	869	-46
Parent Education Level																		
No Diploma	757	720	37	757	715	42	754	723	31	748	730	18	747	733	14	746	729	17
High School Diploma	848	796	52	847	793	54	842	799	43	838	799	39	837	805	32	840	808	32
Associate Degree	871	824	47	870	818	52	866	821	45	861	821	40	864	828	36	865	832	33
Bachelor's Degree	942	893	49	943	889	54	941	890	51	939	897	42	943	908	35	947	909	38
Graduate Degree	1000	950	50	1003	942	61	1005	956	49	1004	961	43	1006	974	32	1012	977	35
Family Income																		
Less than $10,000	781	714	67	780	716	64	776	720	56	768	722	46	767	738	29	768	729	39
$10,000-$20,000	833	776	57	829	771	58	820	769	51	813	778	35	812	776	36	813	780	33
$20,000-$30,000	876	823	53	870	815	55	864	816	48	856	818	38	856	826	30	857	825	32
$30,000-$40,000	902	847	55	898	841	57	889	842	47	884	840	44	885	849	36	887	853	34
$40,000-$50,000	928	883	45	924	868	56	918	872	46	910	867	43	910	879	31	914	875	39
$50,000-$60,000	946	899	47	944	890	54	938	887	51	931	891	40	932	904	28	933	900	33
$60,000-$70,000	961	911	50	959	907	52	953	903	50	949	909	40	950	919	31	953	923	30
$70,000 or more	992	948	44	996	942	54	995	949	46	997	950	47	1000	961	39	1005	970	35
Total Credits in Six Subjects																		
20 or more	1008	959	49	1005	951	54	1001	945	56	996	951	45	996	960	36	999	958	41
19 or 19.5	946	913	33	937	903	34	930	903	27	923	899	24	922	905	17	923	898	25
18 or 18.5	909	868	41	901	858	43	892	860	32	884	851	33	884	863	21	883	861	22
17 or 17.5	869	830	39	860	818	42	851	818	33	844	816	28	844	817	27	846	824	22
16 or 16.5	830	786	44	824	780	44	815	777	38	810	778	32	812	781	31	817	787	30
15 or 15.5	802	764	38	797	764	33	791	756	35	789	760	29	795	768	27	802	779	23
Fewer than 15	758	717	41	758	715	43	755	724	31	755	733	22	765	748	17	776	767	9
High School GPA																		
A+ (97-100)	1181	1118	63	1178	1103	75	1177	1114	63	1172	1107	65	1171	1133	38	1170	1126	44
A (93-96)	1083	1012	71	1079	998	81	1076	1001	75	1074	1005	69	1072	1018	54	1070	1014	56
A- (90-92)	1017	932	85	1014	924	90	1012	934	78	1008	929	79	1006	937	69	1004	933	71
B (80-89)	880	812	68	878	805	73	871	803	68	866	807	59	867	815	52	866	817	49
C (70-79)	762	711	51	760	704	56	755	709	46	751	712	39	750	712	38	748	714	34
D or below	726	700	26	727	698	29	730	680	50	719	684	35	717	673	44	717	674	43
High School Rank																		
Top Tenth	1100	1037	63	1100	1032	68	1097	1038	59	1096	1036	60	1097	1055	42	1099	1054	45
Second Tenth	965	904	61	965	898	67	961	906	55	959	907	52	959	913	46	962	919	43
Second Fifth	880	817	63	879	813	66	875	818	57	873	820	53	876	832	44	878	834	44
Third Fifth	790	734	56	786	725	61	783	727	56	781	737	44	784	741	43	786	747	39
Fourth Fifth	740	681	59	735	680	55	732	682	50	729	684	45	729	689	40	730	688	42
Bottom Fifth	725	677	48	719	641	78	712	667	45	708	654	54	701	674	27	699	664	35

Table 12. United States and North Carolina Verbal SAT Scores for Categories of Students: 1988–1993

	1988			1989			1990			1991			1992			1993		
	U.S.	N.C.	Diff.	U.S.	N.C.	Diff.	U.S.	N.C.	Diff.	U.S.	N.C.	Diff.	U.S.	N.C.	Diff.	U.S.	N.C.	Diff.
All Students	428	401	27	427	397	30	424	401	23	422	400	22	423	405	18	424	406	18
Sex																		
Male	435	408	27	434	402	32	429	404	25	426	403	23	428	408	20	428	409	19
Female	422	395	27	421	393	28	419	398	21	418	398	20	419	402	17	420	403	17
Race/Ethnicity																		
American Indian	393	360	33	384	364	20	388	361	27	393	357	36	395	357	38	400	363	37
Asian American	408	392	16	409	395	14	410	401	9	411	405	6	413	410	3	415	404	11
Black	353	328	25	351	328	23	352	334	18	351	336	15	352	341	11	353	342	11
White	445	423	22	446	420	26	442	423	19	441	423	18	442	427	15	444	428	16
Other	385	399	-14	386	415	-29	384	409	-25	383	410	-27	384	413	-29	386	413	-27
Parent Education Level																		
No Diploma	347	337	10	345	336	9	342	338	4	339	342	-3	338	341	-3	338	339	-1
High School Diploma	402	379	23	400	376	24	397	380	17	395	378	17	394	380	14	395	381	14
Associate Degree	414	393	21	412	389	23	409	391	18	407	389	18	408	393	15	408	394	14
Bachelor's Degree	446	426	20	446	423	23	443	424	19	442	425	17	444	430	14	445	430	15
Graduate Degree	476	456	20	477	450	27	476	458	18	476	458	18	476	463	13	478	465	13
Family Income																		
Less than $10,000	363	337	26	360	338	22	357	342	15	353	342	11	352	347	5	352	342	10
$10,000-$20,000	393	370	23	389	367	22	383	366	17	379	368	11	378	367	11	379	368	11
$20,000-$30,000	416	393	23	412	388	24	407	389	18	404	388	16	403	391	12	404	390	14
$30,000-$40,000	429	404	25	426	400	26	420	401	19	418	399	19	418	403	15	418	404	14
$40,000-$50,000	441	422	19	438	412	26	434	415	19	430	410	20	430	417	13	431	415	16
$50,000-$60,000	449	428	21	448	422	26	443	423	20	440	422	18	440	428	12	440	425	15
$60,000-$70,000	456	432	24	455	430	25	450	429	21	449	432	17	449	435	14	449	437	12
$70,000 or more	469	450	19	471	447	24	468	450	18	469	449	20	470	452	18	472	456	16
Total Credits in Six Subjects																		
20 or more	478	458	20	476	454	22	472	452	20	470	453	17	470	457	13	471	456	15
19 or 19.5	448	435	13	443	430	13	438	430	8	435	426	9	434	427	7	434	424	10
18 or 18.5	430	413	17	426	406	20	420	408	12	416	402	14	416	406	10	415	406	9
17 or 17.5	412	395	17	407	387	20	401	388	13	398	385	13	397	384	13	397	387	10
16 or 16.5	394	374	20	390	368	22	384	368	16	382	367	15	382	368	14	384	370	14
15 or 15.5	381	364	17	377	362	15	373	359	14	372	359	13	374	362	12	377	367	10
Fewer than 15	359	341	18	357	339	18	354	344	10	353	346	7	357	352	5	361	360	1
High School GPA																		
A+ (97-100)	554	527	27	552	519	33	551	525	26	549	523	26	548	532	16	547	529	18
A (93-96)	509	479	30	506	472	34	503	473	30	503	474	29	501	480	21	500	478	22
A- (90-92)	478	441	37	476	436	40	473	442	31	471	438	33	470	440	30	469	439	30
B (80-89)	418	388	30	416	383	33	411	383	28	409	383	26	409	387	22	408	387	21
C (70-79)	365	341	24	363	337	26	359	341	18	357	341	16	357	339	18	355	340	15
D or below	348	344	4	345	344	1	343	331	12	338	324	14	338	319	19	339	324	15
High School Rank																		
Top Tenth	515	490	25	515	487	28	512	490	22	512	488	24	512	496	16	513	496	17
Second Tenth	454	429	25	453	425	28	449	429	20	448	428	20	448	430	18	449	432	17
Second Fifth	417	390	27	416	386	30	412	390	22	411	388	23	412	394	18	412	394	18
Third Fifth	379	352	27	376	347	29	373	349	24	372	352	20	373	353	20	373	355	18
Fourth Fifth	358	328	30	354	327	27	351	329	22	350	329	21	350	329	21	350	328	22
Bottom Fifth	352	332	20	346	307	39	342	324	18	340	314	26	338	327	11	336	320	16

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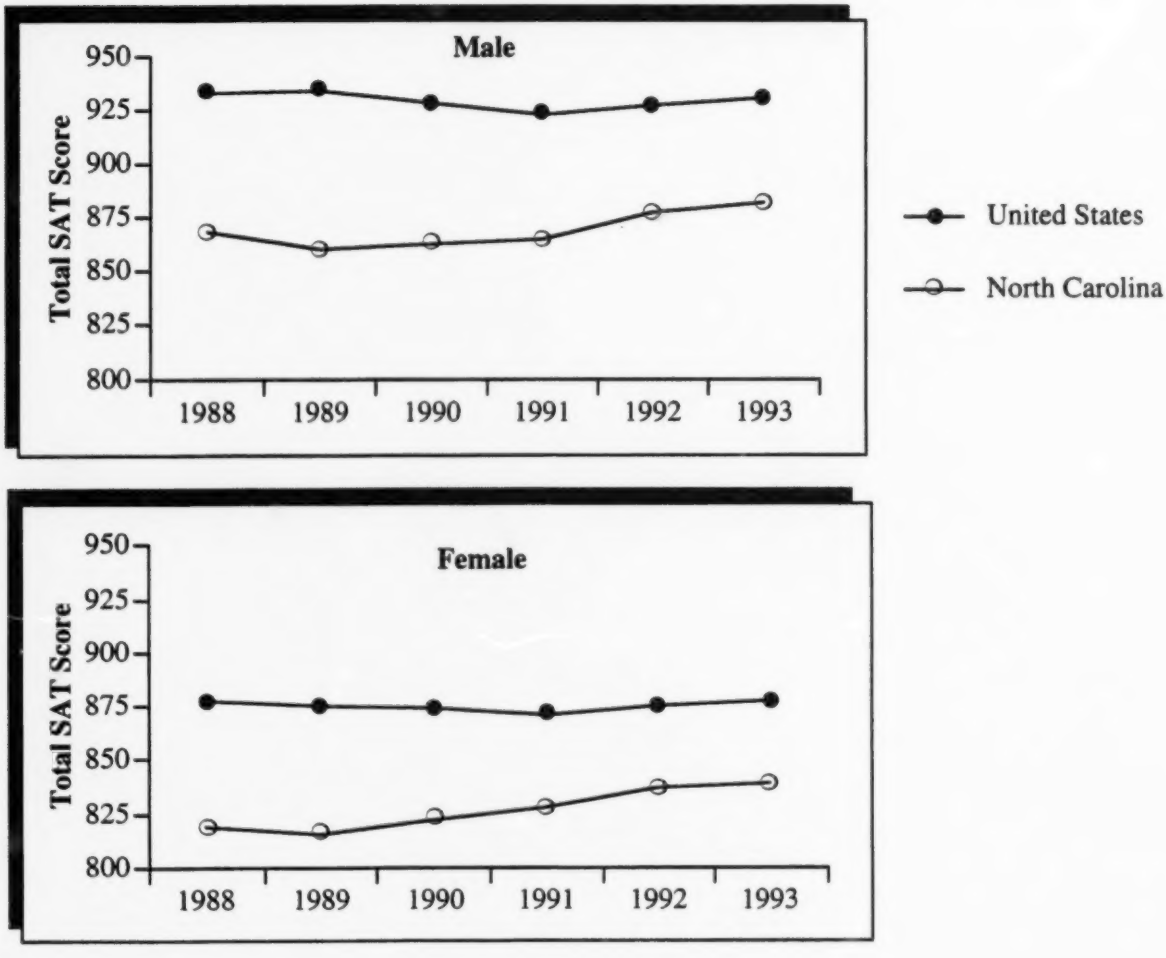
Table 13. United States and North Carolina Mathematics SAT Scores for Categories of Students: 1988–1993

	1988			1989			1990			1991			1992			1993		
	U.S.	N.C.	Diff.	U.S.	N.C.	Diff.	U.S.	N.C.	Diff.	U.S.	N.C.	Diff.	U.S.	N.C.	Diff.	U.S.	N.C.	Diff.
All Students	476	440	36	476	439	37	476	440	36	474	444	30	476	450	26	478	453	25
Sex																		
Male	498	460	38	500	458	42	499	459	40	497	462	35	499	469	30	502	473	29
Female	455	424	31	454	423	31	455	425	30	453	430	23	456	435	21	457	436	21
Race/Ethnicity																		
American Indian	435	405	30	428	404	24	437	408	29	437	407	30	442	407	35	447	412	35
Asian American	522	485	37	525	494	31	528	501	27	530	507	23	532	513	19	535	516	19
Black	384	367	17	386	368	18	385	368	17	385	374	11	385	378	7	388	380	8
White	490	462	28	491	461	30	491	463	28	489	467	22	491	474	17	494	476	18
Other	432	436	-4	435	450	-15	434	443	-9	433	450	-17	435	453	-18	437	456	-19
Parent Education Level																		
No Diploma	410	383	27	412	379	33	412	385	27	409	388	21	409	392	17	408	390	18
High School Diploma	446	417	29	447	417	30	445	419	26	443	421	22	443	425	18	445	427	18
Associate Degree	457	431	26	458	429	29	457	430	27	454	432	22	456	435	21	457	438	19
Bachelor's Degree	496	467	29	497	466	31	498	466	32	497	472	25	499	478	21	502	479	23
Graduate Degree	524	494	30	526	492	34	529	498	31	528	503	25	530	511	19	534	512	22
Family Income																		
Less than $10,000	418	377	41	420	378	42	419	378	41	415	380	35	415	391	24	416	387	29
$10,000-$20,000	440	406	34	440	404	36	437	403	34	434	410	24	434	409	25	434	412	22
$20,000-$30,000	460	430	30	458	427	31	457	427	30	452	430	22	453	435	18	453	435	18
$30,000-$40,000	473	443	30	472	441	31	469	441	28	466	441	25	467	446	21	469	449	20
$40,000-$50,000	487	461	26	486	456	30	484	457	27	480	457	23	480	462	18	483	460	23
$50,000-$60,000	497	471	26	496	468	28	495	464	31	491	469	22	492	476	16	493	475	18
$60,000-$70,000	505	479	26	504	477	27	503	474	29	500	477	23	501	484	17	504	486	18
$70,000 or more	523	498	25	525	495	30	527	499	28	528	501	27	530	509	21	533	514	19
Total Credits in Six Subjects																		
20 or more	530	501	29	529	497	32	529	493	36	526	498	28	526	503	23	528	502	26
19 or 19.5	498	478	20	494	473	21	492	473	19	488	473	15	488	478	10	489	474	15
18 or 18.5	479	455	24	475	452	23	472	452	20	468	449	19	468	457	11	468	455	13
17 or 17.5	457	435	22	453	431	22	450	430	20	446	431	15	447	433	14	449	437	12
16 or 16.5	436	412	24	434	412	22	431	409	22	428	411	17	430	413	17	433	417	16
15 or 15.5	421	400	21	420	402	18	418	397	21	417	401	16	421	406	15	425	412	13
Fewer than 15	399	376	23	401	376	25	401	380	21	402	387	15	408	396	12	415	407	8
High School GPA																		
A+ (97-100)	627	591	36	626	584	42	626	589	37	623	584	39	623	601	22	623	597	26
A (93-96)	574	533	41	573	526	47	573	528	45	571	531	40	571	538	33	570	536	34
A- (90-92)	539	491	48	538	488	50	539	492	47	537	491	46	536	497	39	535	494	41
B (80-89)	462	424	38	462	422	40	460	420	40	457	424	33	458	428	30	458	430	28
C (70-79)	397	370	27	397	367	30	396	368	28	394	371	23	393	373	20	393	374	19
D or below	378	356	22	382	354	28	387	349	38	381	360	21	379	354	25	378	350	28
High School Rank																		
Top Tenth	585	547	38	585	545	40	585	548	37	584	548	36	585	559	26	586	558	28
Second Tenth	511	475	36	512	473	39	512	477	35	511	479	32	511	483	28	513	487	26
Second Fifth	463	427	36	463	427	36	463	428	35	462	432	30	464	438	26	466	440	26
Third Fifth	411	382	29	410	378	32	410	378	32	409	385	24	411	388	23	413	392	21
Fourth Fifth	382	353	29	381	353	28	381	353	28	379	355	24	379	360	19	380	360	20
Bottom Fifth	373	345	28	373	334	39	370	343	27	368	340	28	363	347	16	363	344	19

Figure 5. United States and North Carolina Total SAT Scores for Male and Female Students: 1988-1993



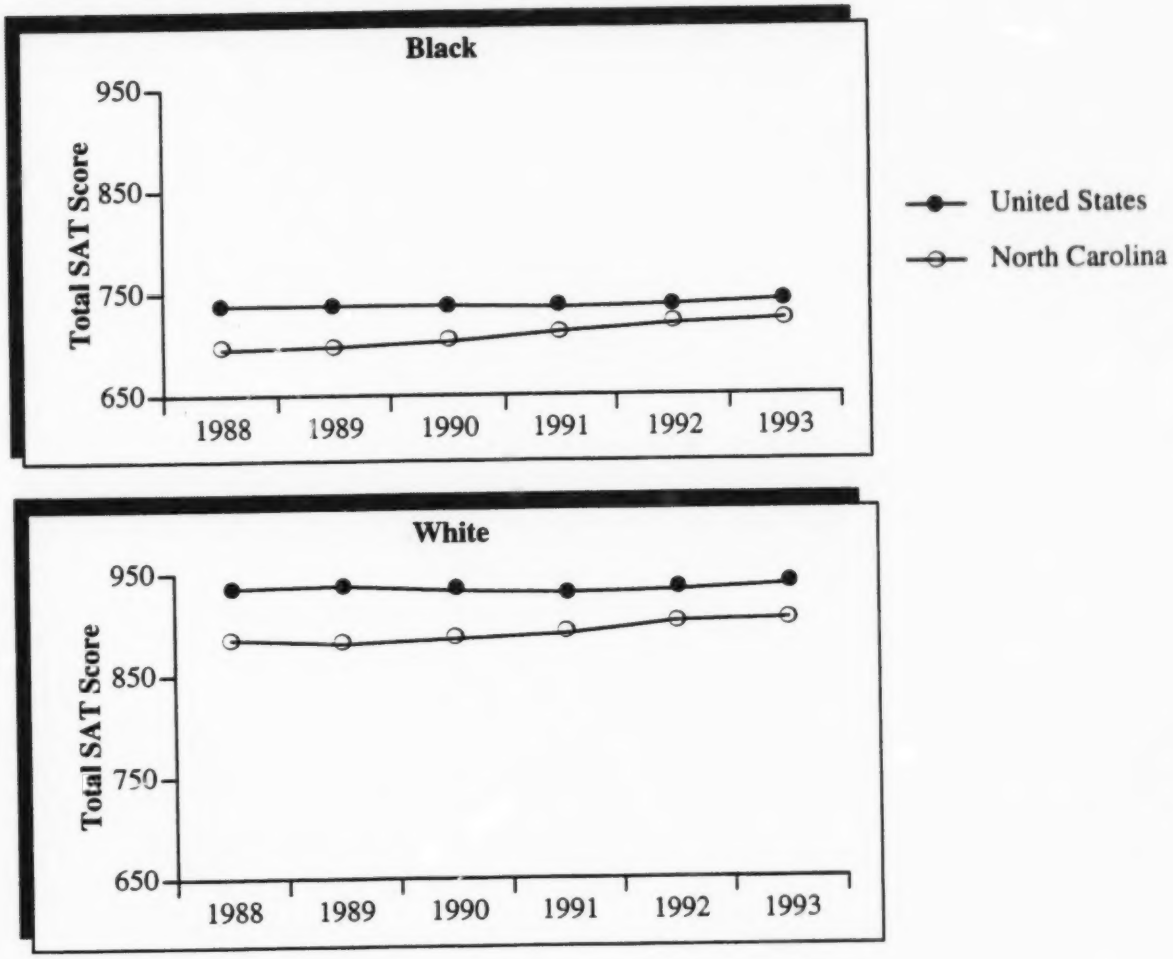
Observations:

- From 1988 to 1992, national total SAT scores for males and females were generally on a downward trend. North Carolina scores for both groups generally have been on an upward trend since 1990, closing the gap between North Carolina and the nation for both males and females.

- Both nationally and in North Carolina males outperform females by about 50 points.

Data Source: Table 11.

Figure 6. United States and North Carolina Total SAT Scores for Black and White Students: 1988-1993

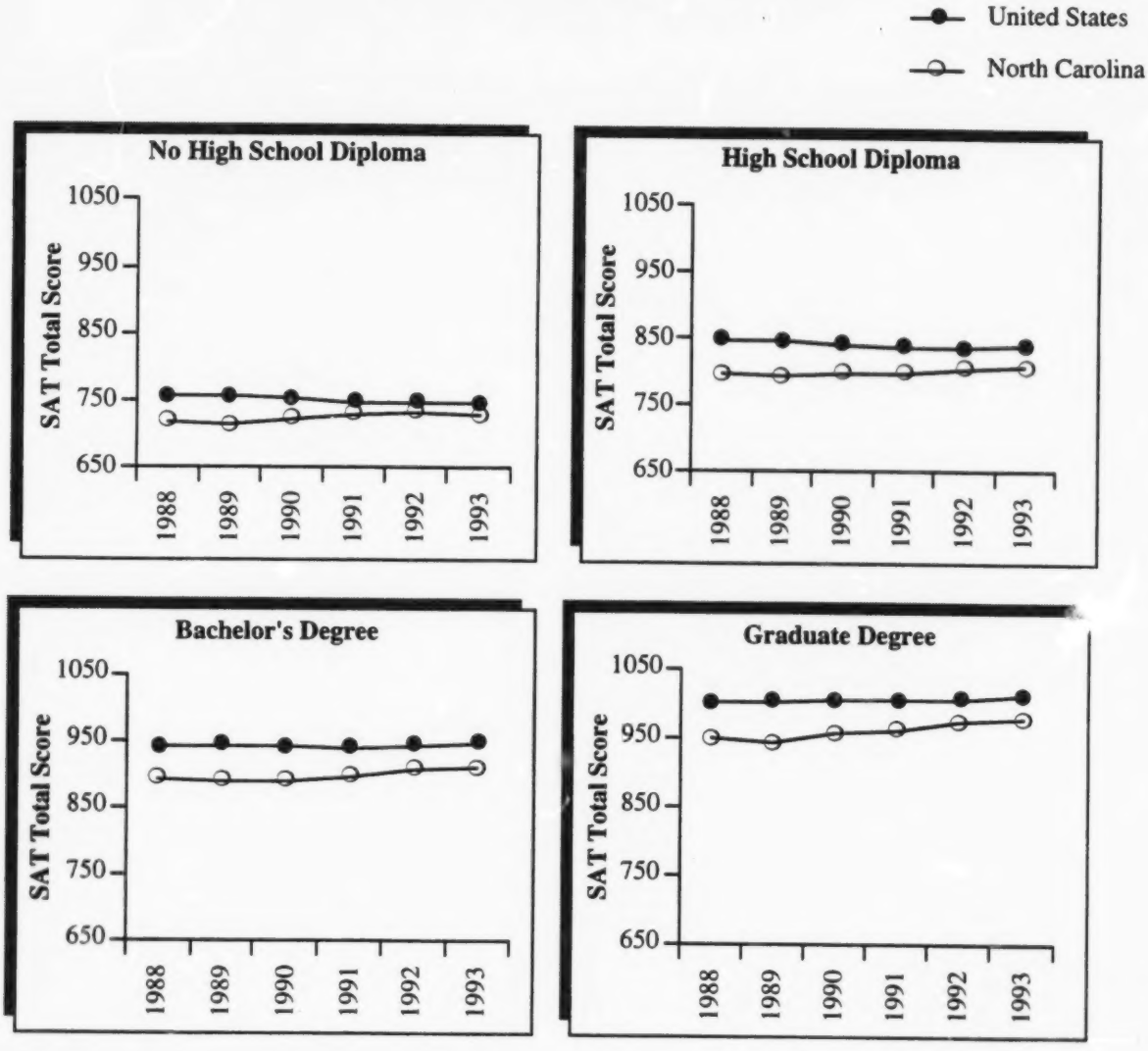


Observations:

- The gap between total SAT scores for national and North Carolina black and white students has narrowed between 1988 and 1993.
- The largest difference since 1988 between scores of black students nationally and in North Carolina was a 42 point difference in 1988. The smallest difference was an 18 point difference occurring in 1992 (the 1993 difference was 19.)
- The largest difference since 1988 between scores of white students nationally and in North Carolina was a 56 point difference in 1989. The smallest difference was a 32 point difference occurring in 1992 (the 1993 difference was 34.)

Data Source: Table 11.

Figure 7. United States and North Carolina Total SAT Scores for Students by Parent Education Level: 1988-1993

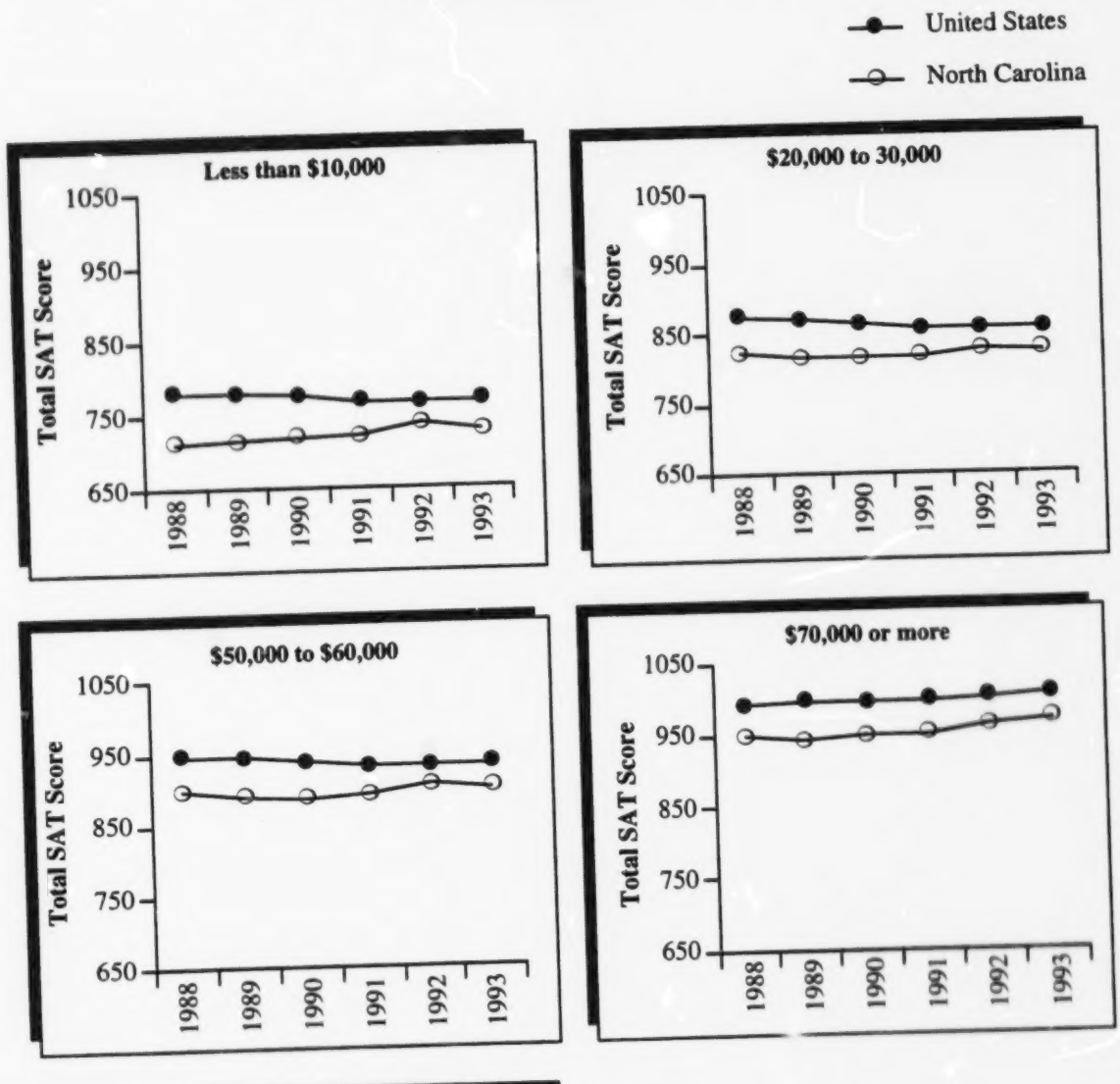


Observations:

- The gap between total SAT scores for national and North Carolina students in all parent education levels has narrowed between 1988 and 1993.
- Student scores increased as parent education level increased.

Data Source: Table 11.

Figure 8. United States and North Carolina Total SAT Scores for Students by Family Income: 1988-1993

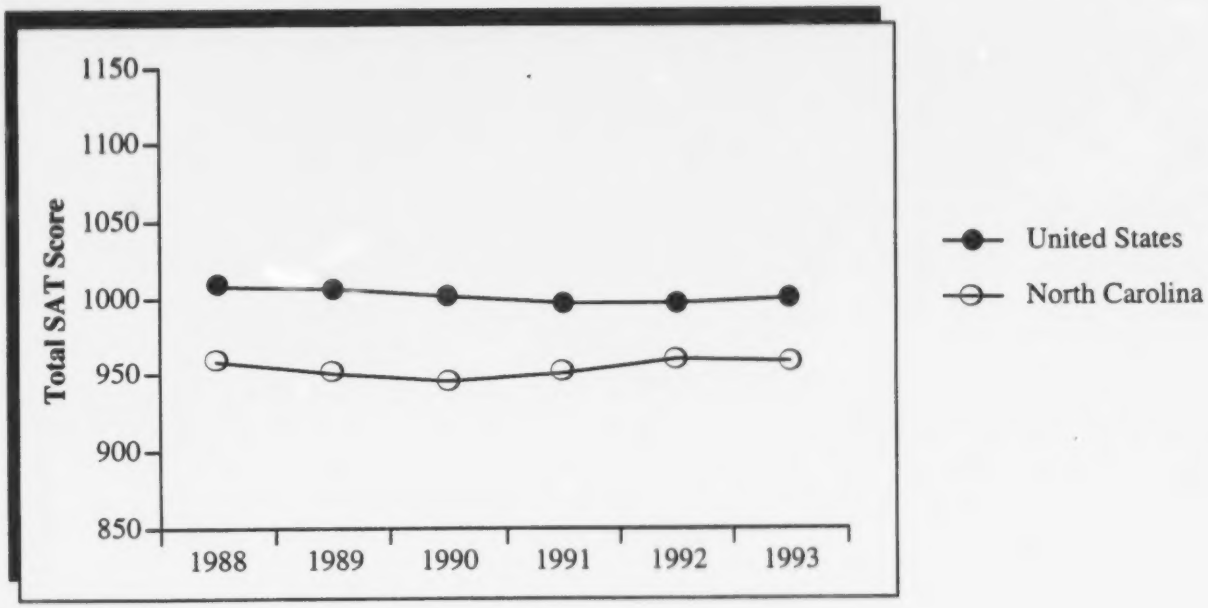


Observations:

- The gap between total SAT scores for national and North Carolina students in various family income groups has narrowed between 1988 and 1993. The narrowing of the gap has occurred across all income groups, with the largest gains occurring in the lower income groups.
- Student scores increased as family income increased.

Data Source: Table 11.

Figure 9. United States and North Carolina Total SAT Scores for Students with 20 or More Credits in Six Academic Subjects: 1988-1993



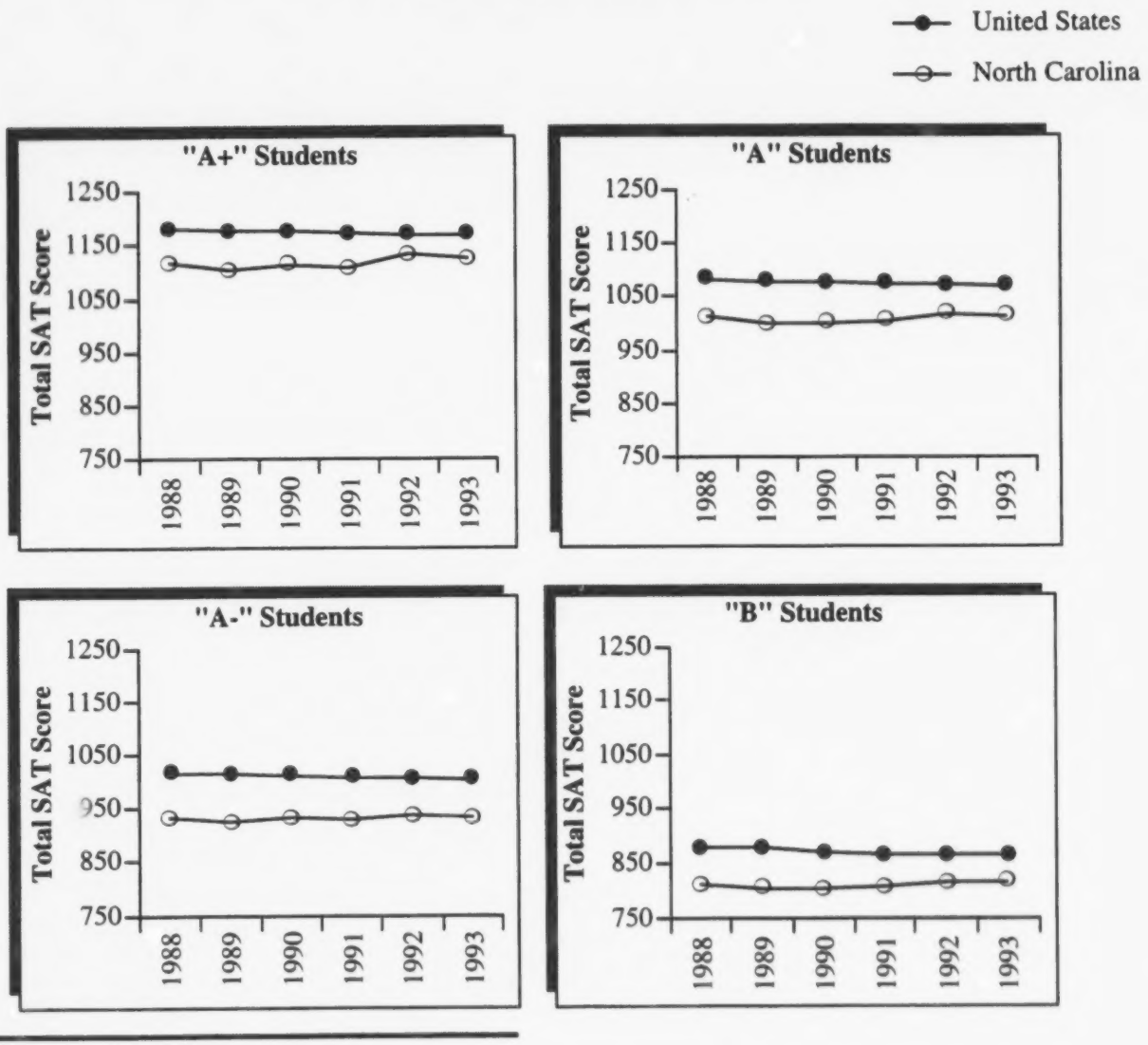
Observations:

- The gap between total SAT scores for national and North Carolina students who have twenty or more credits in six academic subjects has narrowed since 1988. The largest gap in that time period was 56 in 1990. The lowest difference was 36 in 1992 (the 1993 difference was 41.)

Note: The six academic subject areas are: Arts and Music, Foreign and Classical Languages, Social Sciences and History, Mathematics, English, and Natural Sciences.

Data Source: Table 11.

Figure 10. United States and North Carolina Total SAT Scores for A+, A, A-, and B Students: 1988-1993



Observations:

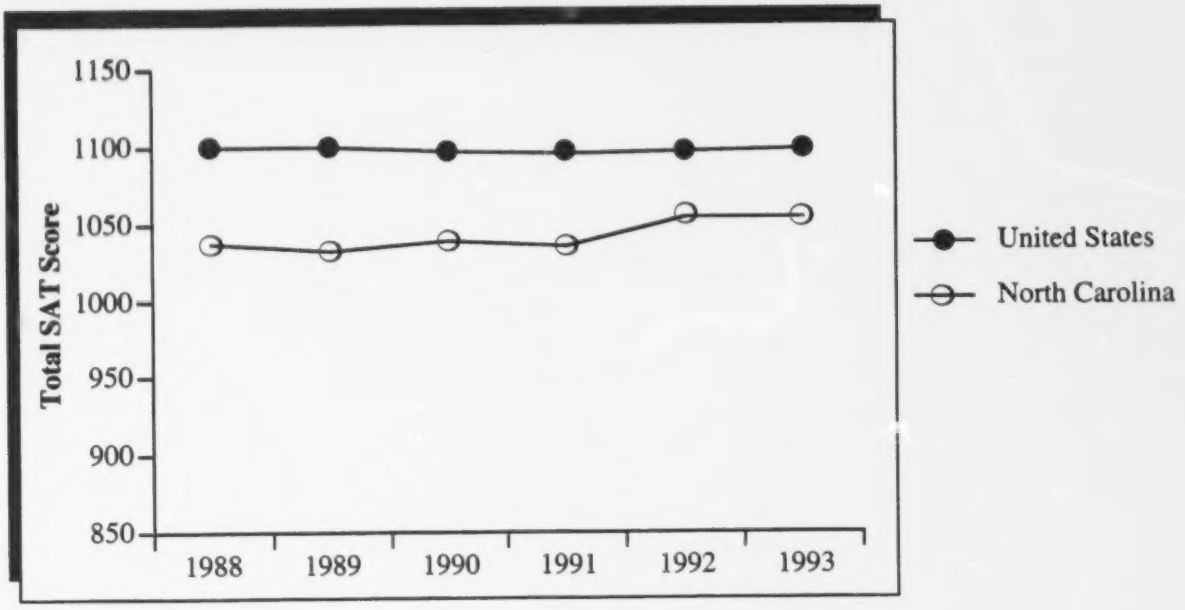
- The gap between total SAT scores for national and North Carolina students with grades of A+, A, A- and B has narrowed since 1988. The gap between national and North Carolina A+ students reached a high of 75 in 1989. The lowest difference of 38 occurred in 1992 (the 1993 difference was 44.)

- North Carolina's top students are not doing as well as the top students in the United States.

Note: Students who reported having a grade point average of B+, B or B- are included as "B" students.

Data Source: Table 11.

Figure 11. United States and North Carolina Total SAT Scores for Students in the Top Ten Percent of their High School Class: 1988-1993



Observations:

- The gap between total SAT scores for national and North Carolina students in the top tenth of their class has narrowed since 1988. The greatest difference since 1988 was 68 points in 1989. The lowest difference of 42 was in 1992 (the 1993 difference was 45.)

- As the results for grade point average revealed, results for the top ten percent show that North Carolina's top students perform at a much lower level than top students nationally.

Data Source: Table 11.

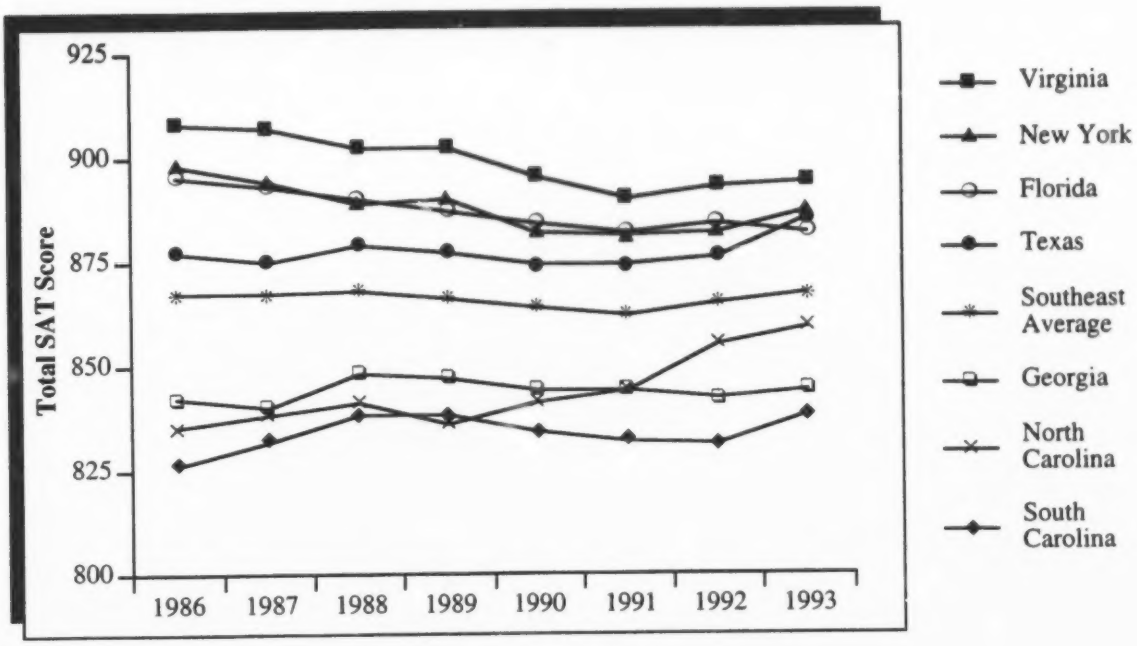
Comparing the Performance of

North Carolina and Six Selected States

1993 and Historically

This section presents the 1993 performance of certain categories of students in North Carolina compared to the performance of the same categories of students in selected other states. Four of the selected states, Florida, Georgia, South Carolina and Virginia, were chosen because of their proximity to North Carolina. The other two states, New York and Texas, were chosen because their general population characteristics are similar to North Carolina's.

Figure 12. Average Total SAT Scores for North Carolina and Selected States: 1986-1993



Observations:

- Virginia, Florida, New York and Texas consistently outscore North Carolina by a wide margin.
- North Carolina performance had been somewhat below Georgia's until the 1991 tie. North Carolina's 1992 and 1993 scores surpassed Georgia's.
- North Carolina fell below South Carolina in 1989 but regained the loss in 1990.
- North Carolina's performance has always been somewhat below the Southeast average; however, since 1989 the difference has dramatically decreased.

Data Source: Table 11.

Table 14. Demographic Characteristics and 1993 SAT Scores for Categories of Students

	United States	North Carolina	Florida	Georgia	New York	South Carolina	Texas	Virginia
State and Local Per Capita Expenditures for Public Schools[1]	$812	$743	$775	$787	$1,097	$753	$821	$838
Pupils per Teacher[2]	17.2	17.1	17.0	18.3	14.7	17.0	16.7	15.9
Percent of Children in Poverty[3]		16.9	18.3	19.8	18.8	20.8	24.0	13.0
Percent Minority of those Persons age 5-17[4]	25	31	26	36	32	39	30	27
Percent of Adults with Four years of High School[5]	N/A	71.4	79.7	73.9	78.2	70.2	76.6	76.6
Percent of 19-20 year olds with High School Credentials[6]	N/A	85	79	80	86	84	80	86
Percent of Students Admitted to any 4-year College[7]	35	37	25	39	38	34	31	39
Percent of High School Students Taking Key Math Courses[8]								
Algebra I	N/A	67	78	N/A	69	69	82	81
Algebra II	N/A	51	42	N/A	46	55	54	55
Calculus	N/A	8	9	N/A	12	7	5	11
SAT Participation Rate[9]	43	60	52	65	74	61	45	63
Average Total SAT Score[9]	902	859	882	844	887	838	885	894
Average Mathematics SAT Score[9]	478	453	466	445	471	442	472	469
Average Verbal SAT Score[9]	424	406	416	399	416	396	413	425

1 "Per Capita Amounts of Selected Financial Items for State and Local Goverments by State: 1989-90 ," *Goverment Finances in 1990-91*, p.99

2 *The World Almanac Book of Facts 1992*, New York: An Imprint of Pharos Books.

3 U.S. Bureau of the Census. Poverty Division. *Poverty Statistics for Related Children*. 1990 Census of Population.

4 "Income and Poverty Status in 1989 (Table 3)", 1990 Census of Population and Housing, STF3.

5 U.S. Bureau of the Census, Current Population Reports, *Educational Attainment of the U.S.: March 1991 and 1990*. Washington, D.C.: GPO, 1992.

6 National Education Goals Panel, *National Education Goals Report 1992: Building a Nation of Learners*. Washington, D.C.: GPO, 1992.

7 *Digest of Education Statistics 1991*. (calculated based on data from tables 96 and 193).

8 Council of Chief State School Officers. *State Policies on Science and Mathematics Education 1992*. Washington, D.C., 1992.

9 The College Board, *1993 Profile of SAT and Achievement Test Takers*.

Table 15. 1993 Total SAT Scores for the U.S., N.C. and Other Selected States

	United States average	%	North Carolina average	%	Florida average	%	Georgia average	%	New York average	%	South Carolina average	%	Texas average	%	Virginia average	%
All Students	902	100	859	100	882	100	844	100	887	100	838	100	885	100	894	100
Sex																
Male	930	47	882	45	907	46	871	46	913	47	867	45	910	47	919	47
Female	877	53	839	55	861	54	821	54	865	53	815	55	862	53	873	53
Ethnicity																
American Indian	847	1	775	1	843	1	795	1	821	1	806	1	877	1	833	1
Asian American	950	8	920	2	934	4	911	3	963	7	929	2	960	5	931	7
Black	741	11	722	22	733	13	716	25	750	12	713	29	735	11	737	16
White	938	70	904	73	925	66	897	69	931	69	894	67	934	62	934	72
Other	823	9	869	2	837	16	850	2	800	11	853	1	808	21	877	4
Parent Education Level																
No Diploma	746	5	729	3	748	4	701	4	759	7	724	4	747	7	736	1
High School Diploma	840	37	808	44	839	36	794	44	838	40	787	46	831	37	820	36
Associate Degree	865	8	832	10	858	10	822	7	873	10	824	11	853	7	844	7
Bachelor's Degree	947	27	909	26	916	28	902	26	943	22	895	23	929	28	939	28
Graduate Degree	1012	24	977	17	964	22	960	19	1019	21	958	16	986	21	1010	25
Family Income																
Less than $10,000	768	6	729	5	768	6	702	7	755	7	702	7	751	7	745	4
$10,000-$20,000	813	11	780	13	813	14	759	13	811	13	764	16	802	13	786	10
$20,000-$30,000	857	14	825	16	853	17	811	15	845	15	810	17	850	15	838	14
$30,000-$40,000	887	17	853	19	883	17	837	17	881	16	836	18	881	17	864	16
$40,000-$50,000	914	13	875	14	908	12	870	12	908	13	870	13	900	12	898	13
$50,000-$60,000	933	11	900	11	913	10	885	11	929	10	893	10	918	10	920	12
$60,000-$70,000	953	8	923	7	927	7	905	7	952	7	914	6	938	7	957	9
$70,000 or more	1005	21	970	15	969	18	960	17	1021	18	959	12	981	19	1001	23
Total Credits in Six Subjects																
20 or more	999	42	958	33	969	43	958	26	980	56	949	29	1004	27	988	49
19 or 19.5	923	13	898	13	890	14	912	11	852	10	881	12	938	13	896	12
18 or 18.5	883	12	861	14	849	13	868	13	821	9	845	14	905	15	851	10
17 or 17.5	846	10	824	11	815	10	830	13	800	7	809	13	861	14	820	8
16 or 16.5	817	8	787	8	800	7	795	11	791	6	776	10	820	11	803	6
15 or 15.5	802	6	779	7	794	5	780	9	763	4	757	7	793	7	783	5
Fewer than 15	776	11	767	14	791	8	750	18	730	7	736	15	764	14	751	10
High School GPA																
A+ (97-100)	1170	5	1126	5	1144	7	1141	4	1239	2	1131	3	1136	7	1173	4
A (93-96)	1070	13	1014	15	1036	12	1023	12	1123	10	1024	10	1016	17	1077	11
A- (90-92)	1004	14	933	15	974	12	949	13	1038	13	951	12	943	18	1011	12
B (80-89)	866	51	817	49	849	51	812	53	866	55	818	52	819	50	882	49
C (70-79)	748	17	714	16	738	18	717	17	736	19	720	23	730	8	754	23
D or below	717	0	674	0	714	0	689	0	685	1	684	1	710	0	699	1
High School Rank																
Top Tenth	1099	21	1054	21	1081	21	1049	17	1119	17	1031	20	1063	22	1096	18
Second Tenth	962	22	919	22	943	21	914	21	977	21	890	21	926	22	968	21
Second Fifth	878	27	834	28	856	28	835	27	888	28	819	27	854	29	882	28
Third Fifth	786	24	747	25	775	26	751	29	793	28	736	26	775	22	787	27
Fourth Fifth	730	4	688	4	715	4	701	5	728	5	680	5	720	4	738	5
Bottom Fifth	699	1	664	1	683	1	670	1	695	1	651	1	682	1	711	1

Table 16. 1993 Verbal SAT Scores for the U.S., N.C. and Other Selected States

	United States average	%	North Carolina average	%	Florida average	%	Georgia average	%	New York average	%	South Carolina average	%	Texas average	%	Virginia average	%
All Students	424	100	406	100	416	100	399	100	416	100	396	100	413	100	425	100
Sex																
Male	428	47	409	45	419	46	404	46	420	47	403	45	417	47	428	47
Female	420	53	403	55	414	54	394	54	413	53	390	55	409	53	423	53
Ethnicity																
American Indian	400	1	363	1	394	1	376	1	385	1	388	1	411	1	397	1
Asian American	415	8	404	2	418	4	400	3	417	7	417	2	421	5	411	7
Black	353	11	342	22	346	13	336	25	361	12	334	29	344	11	353	16
White	444	70	428	73	438	66	426	69	438	69	424	67	439	62	447	72
Other	386	9	413	2	395	16	403	2	380	11	407	1	374	21	417	4
Parent Education Level																
No Diploma	338	5	339	3	345	4	323	4	346	7	335	4	338	7	341	4
High School Diploma	395	37	381	44	395	36	374	44	394	40	371	46	387	37	391	36
Associate Degree	408	8	394	10	405	10	389	7	410	10	390	11	399	7	403	7
Bachelor's Degree	445	27	430	26	432	28	428	26	443	22	423	23	435	28	446	28
Graduate Degree	478	24	465	17	456	22	456	19	481	21	456	16	463	21	483	25
Family Income																
Less than $10,000	352	6	342	5	358	6	326	7	347	7	328	7	343	7	350	4
$10,000-$20,000	379	11	368	13	382	14	356	13	376	13	360	16	371	13	372	10
$20,000-$30,000	404	14	390	16	403	17	383	15	398	15	384	17	397	15	399	14
$30,000-$40,000	418	17	404	19	418	17	397	17	415	16	395	18	412	17	413	16
$40,000-$50,000	431	13	415	14	429	12	413	12	427	13	413	13	422	12	429	13
$50,000-$60,000	440	11	425	11	431	10	420	11	438	10	421	10	431	10	440	12
$60,000-$70,000	449	8	437	7	439	7	428	7	448	7	430	6	440	7	458	9
$70,000 or more	472	21	456	15	457	18	453	17	480	18	453	12	458	19	475	23
Total Credits in Six Subjects																
20 or more	471	42	456	33	458	43	456	26	460	56	450	29	471	27	471	49
19 or 19.5	434	13	424	13	419	14	432	11	402	10	416	12	438	13	426	12
18 or 18.5	415	12	406	14	399	13	409	13	388	9	400	14	421	15	404	10
17 or 17.5	397	10	387	11	385	10	389	13	377	7	381	13	401	14	390	8
16 or 16.5	384	8	370	8	377	7	375	11	373	6	366	10	383	11	382	6
15 or 15.5	377	6	367	7	373	5	369	9	358	4	357	7	370	7	373	5
Fewer than 15	361	11	360	14	370	8	352	18	339	7	345	15	354	14	355	10
High School GPA																
A+ (97-100)	547	5	529	5	535	7	539	4	587	2	535	3	529	7	556	4
A (93-96)	500	13	478	15	486	12	482	12	525	10	483	10	473	17	510	11
A- (90-92)	469	14	439	15	457	12	446	13	485	13	449	12	438	18	477	12
B (80-89)	408	51	387	49	401	51	384	53	406	55	386	52	383	50	420	49
C (70-79)	355	17	340	16	351	18	341	17	348	19	341	23	343	8	362	23
D or below	339	0	324	0	342	0	330	0	328	1	328	1	338	0	338	1
High School Rank																
Top Tenth	513	21	496	21	505	21	493	17	524	17	486	20	494	22	519	18
Second Tenth	449	22	432	22	442	21	429	21	455	21	419	21	430	22	458	21
Second Fifth	412	27	394	28	403	28	393	27	415	28	386	27	399	29	419	28
Third Fifth	373	24	355	25	369	26	357	29	375	28	349	26	364	22	377	27
Fourth Fifth	350	4	328	4	344	4	336	5	348	5	324	5	339	4	357	5
Bottom Fifth	336	1	320	1	328	1	321	1	335	1	312	1	321	1	347	1

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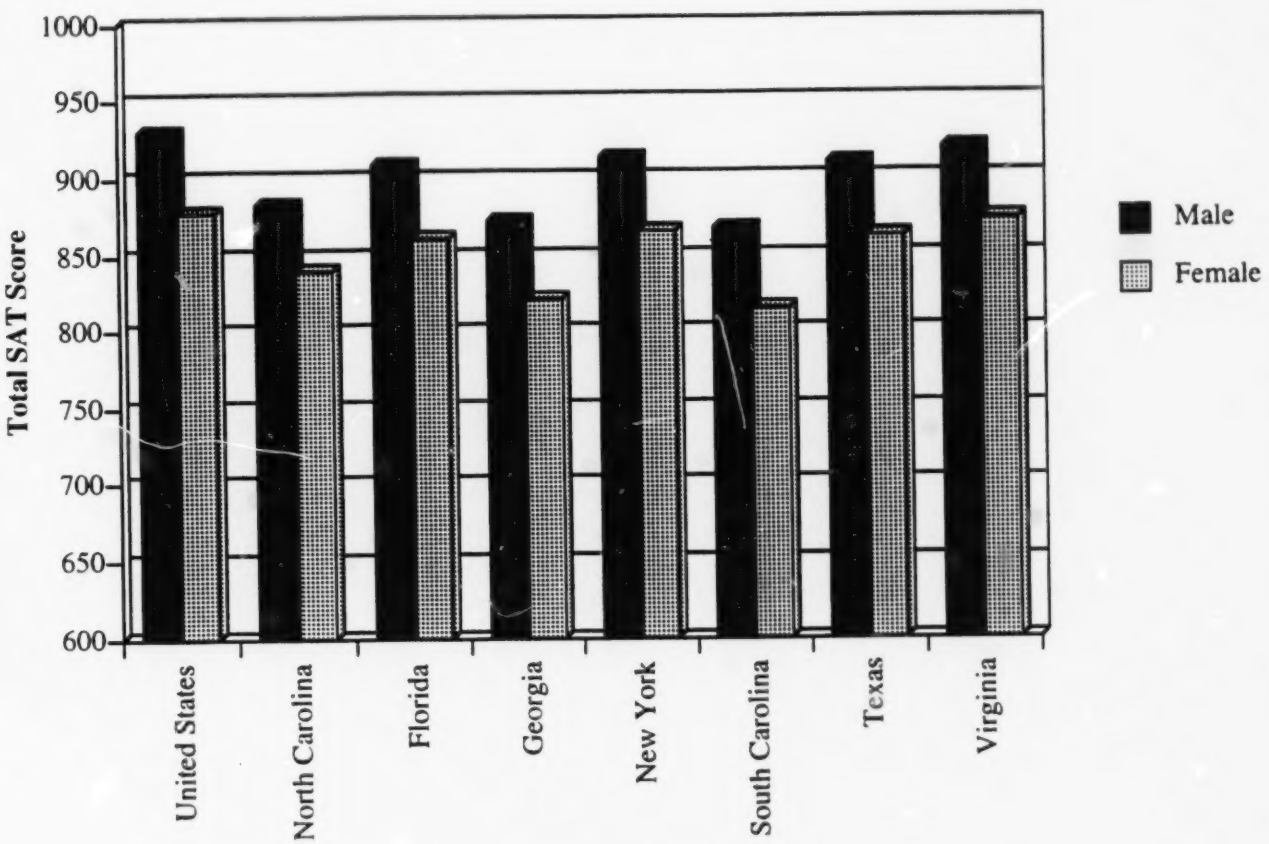
Table 17. 1993 Mathematics SAT Scores for the U.S., N.C. and Other Selected States

	United States average	%	North Carolina average	%	Florida average	%	Georgia average	%	New York average	%	South Carolina average	%	Texas average	%	Virginia average	%
All Students	478	100	453	100	466	100	445	100	471	100	442	100	472	100	469	100
Sex																
Male	502	47	473	45	488	46	467	46	493	47	464	45	493	47	491	47
Female	457	53	436	55	447	54	427	54	452	53	425	55	453	53	450	53
Ethnicity																
American Indian	447	1	412	1	449	1	419	1	436	1	418	1	466	1	436	1
Asian American	535	8	516	2	516	4	511	3	546	7	512	2	539	5	520	7
Black	388	11	380	22	387	13	380	25	389	12	379	29	391	11	384	16
White	494	70	476	73	487	66	471	69	493	69	470	67	495	62	487	72
Other	437	9	456	2	442	16	447	2	420	11	446	1	434	21	460	4
Parent Education Level																
No Diploma	408	5	390	3	403	4	378	4	413	7	389	4	409	7	395	4
High School Diploma	445	37	427	44	444	36	420	44	444	40	416	46	444	37	429	36
Associate Degree	457	8	438	10	453	10	433	7	463	10	434	11	454	7	441	7
Bachelor's Degree	502	27	479	26	484	28	474	26	500	22	472	23	494	28	493	28
Graduate Degree	534	24	512	17	508	22	504	19	538	21	502	16	523	21	527	25
Family Income																
Less than $10,000	416	6	387	5	410	6	376	7	408	7	374	7	408	7	395	4
$10,000-$20,000	434	11	412	13	431	14	403	13	435	13	404	16	431	13	414	10
$20,000-$30,000	453	14	435	16	450	17	428	15	447	15	426	17	453	15	439	14
$30,000-$40,000	469	17	449	19	465	17	440	17	466	16	441	18	469	17	451	16
$40,000-$50,000	483	13	460	14	479	12	457	12	481	13	457	13	478	12	469	13
$50,000-$60,000	493	11	475	11	482	10	465	11	491	10	472	10	487	10	480	12
$60,000-$70,000	504	8	486	7	488	7	477	7	504	7	484	6	498	7	499	9
$70,000 or more	533	21	514	15	512	18	507	17	541	18	506	12	523	19	526	23
Total Credits in Six Subjects																
20 or more	528	42	502	33	511	43	502	26	520	56	499	29	533	27	517	49
19 or 19.5	489	13	474	13	471	14	480	11	450	10	465	12	500	13	470	12
18 or 18.5	468	12	455	14	450	13	459	13	433	9	445	14	484	15	447	10
17 or 17.5	449	10	437	11	430	10	441	13	423	7	428	13	460	14	430	8
16 or 16.5	433	8	417	8	423	7	420	11	418	6	410	10	437	11	421	6
15 or 15.5	425	6	412	7	421	5	411	9	405	4	400	7	423	7	410	5
Fewer than 15	415	11	407	14	421	8	398	18	391	7	391	15	410	14	396	10
High School GPA																
A+ (97-100)	623	5	597	5	609	7	602	4	652	2	596	3	607	7	617	4
A (93-96)	570	13	536	15	550	12	541	12	598	10	541	10	543	17	567	11
A- (90-92)	535	14	494	15	517	12	503	13	553	13	502	12	505	18	534	12
B (80-89)	458	51	430	49	448	51	428	53	460	55	432	52	436	50	462	49
C (70-79)	393	17	374	16	387	18	376	17	388	19	379	23	387	8	392	23
D or below	378	0	350	0	372	0	359	0	357	1	356	1	372	0	361	1
High School Rank																
Top Tenth	586	21	558	21	576	21	556	17	595	17	545	20	569	22	577	18
Second Tenth	513	22	487	22	501	21	485	21	522	21	471	21	496	22	510	21
Second Fifth	466	27	440	28	453	28	442	27	473	28	433	27	455	29	463	28
Third Fifth	413	24	392	25	406	26	394	29	418	28	387	26	411	22	410	27
Fourth Fifth	380	4	360	4	371	4	365	5	380	5	356	5	381	4	381	5
Bottom Fifth	363	1	344	1	355	1	349	1	360	1	339	1	361	1	364	1

Figure 13. 1993 Total SAT Scores for Males and Females for Selected States and the Nation

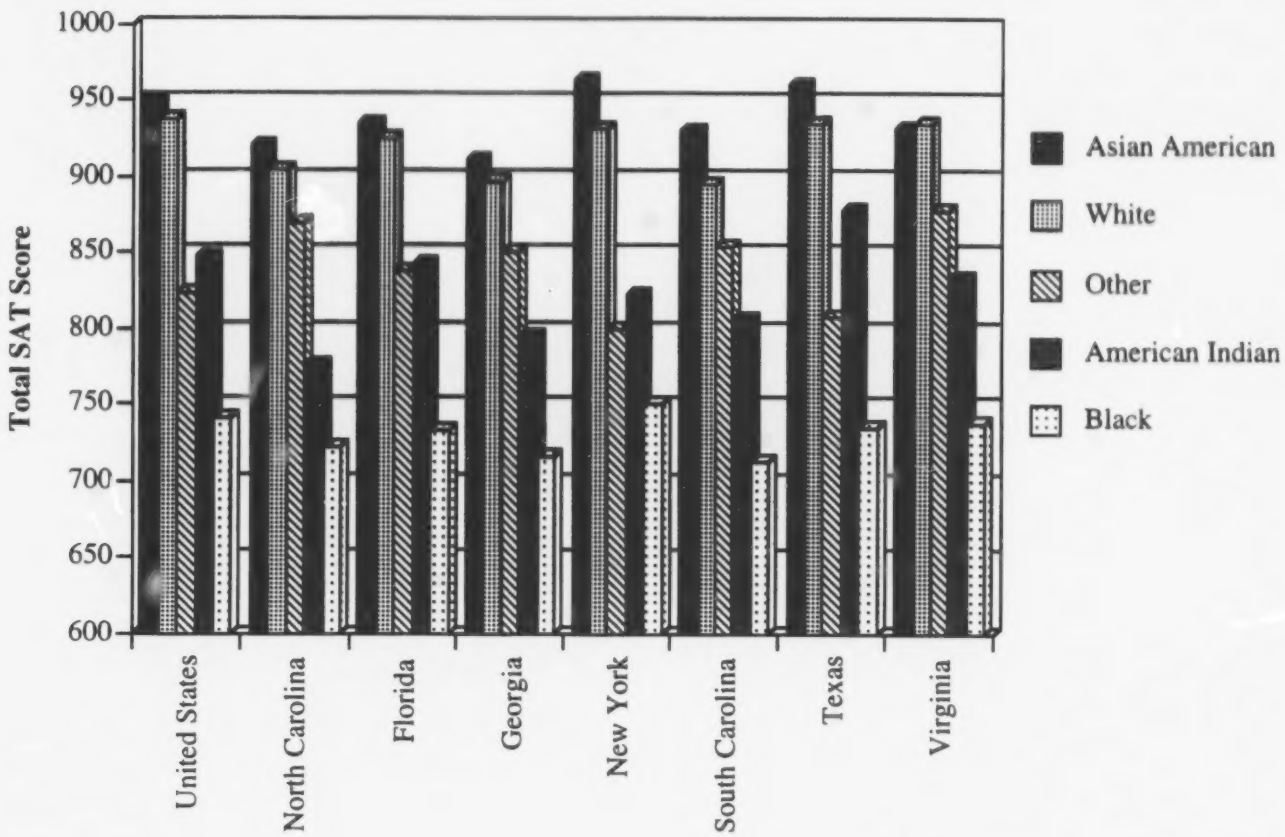


Observations:

- Males score higher than females in all selected states.
- The largest difference between males and females occurs in South Carolina (52 points).
- The smallest difference between males and females occurs in North Carolina (43 points).
- Both males and females are outperformed by their national counterparts, as well as their counterparts in the selected other states, with the exception of Georgia and South Carolina.

Data Source: Table 15.

Figure 14. 1993 Total SAT Scores by Race/Ethnicity for Selected States and the Nation



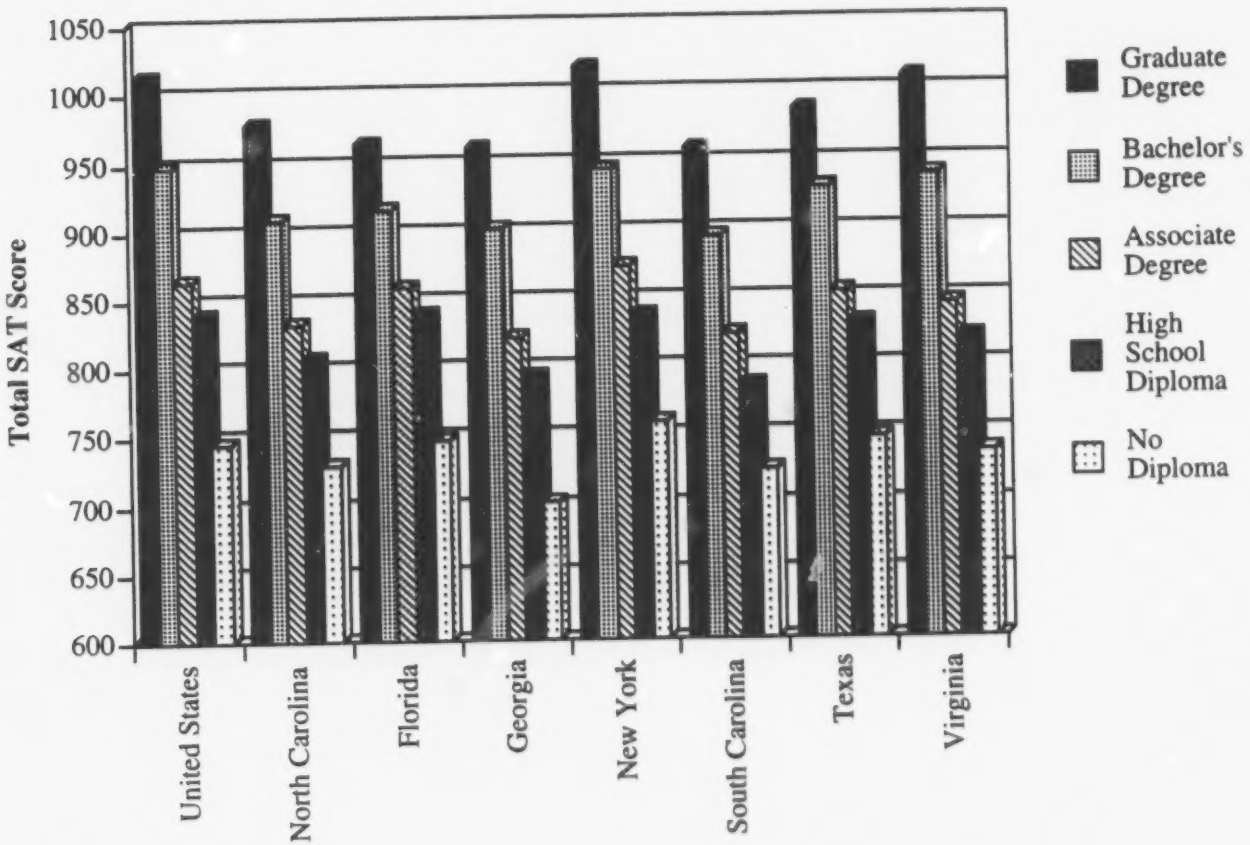
Observations:

- In all of the selected states, except Virginia, Asian American students outscore all other race/ethnic group followed by White students.

- American Indian students in North Carolina score lower than their national counterparts and lower than American Indian students in the SAT states shown. However, the gap in scores for these students is not as large as that for black students.

Data Source: Table 15.

Figure 15. 1993 Total SAT Scores by Parent Education Levels for Selected States and the Nation

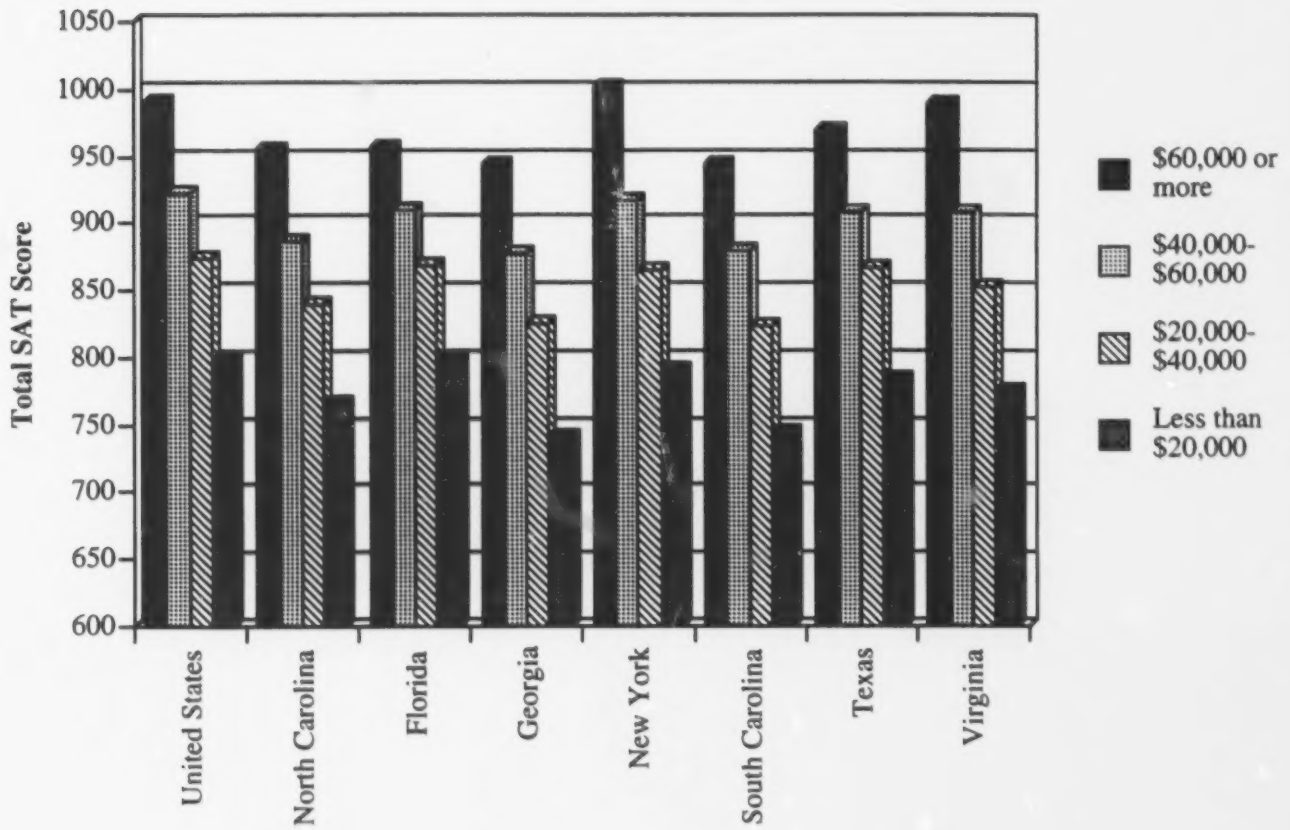


Observations:

- In the nation and each of the selected states, as the level of parent education increases, scores increase.
- At every parent education level, North Carolina students scored lower than their counterparts nationally. Generally, North Carolina students in these categories scored lower than their counterparts in the selected states as well, with the exception of Georgia and South Carolina.

Data Source: Table 15.

Figure 16. 1993 Total SAT Scores by Family Income Level for Selected States and the Nation

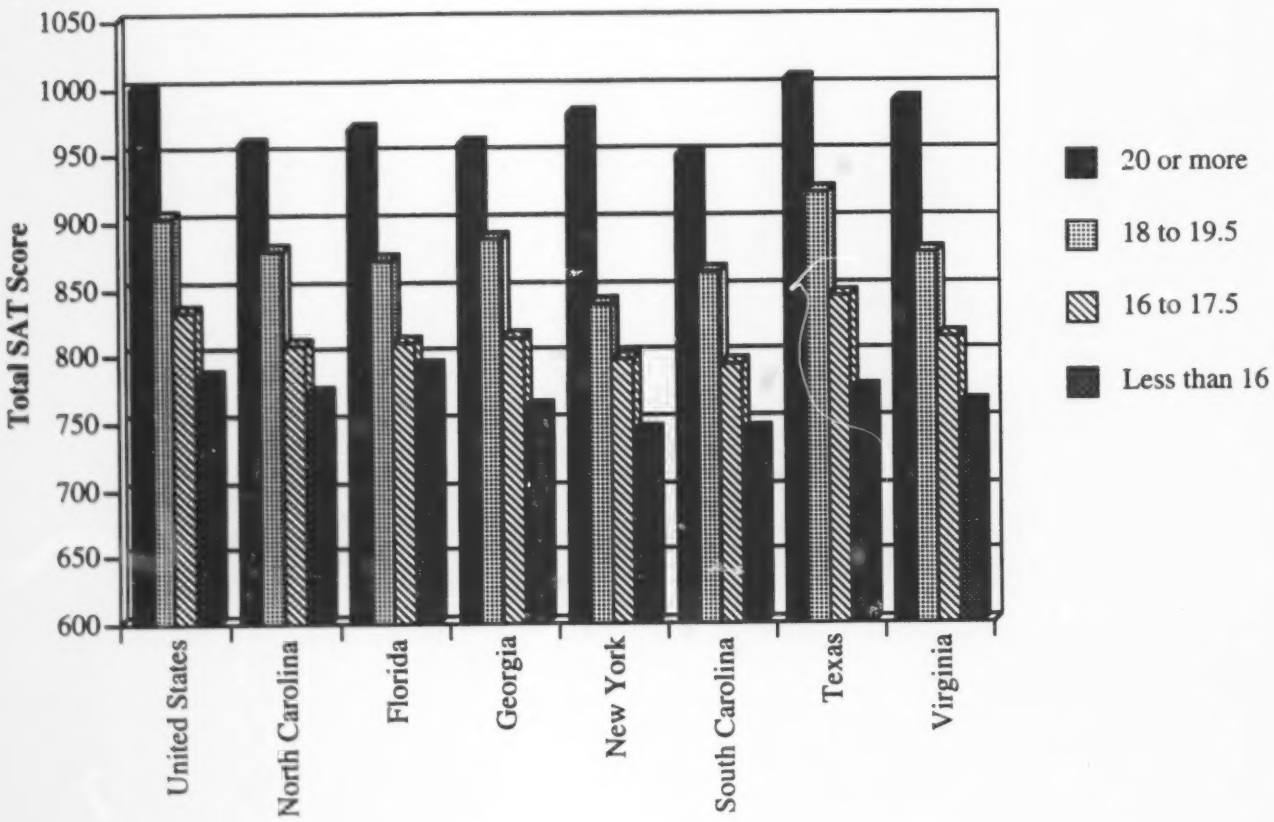


Observations:

- Nationally and in the selected states, students with higher family income levels have higher scores.
- At each income level North Carolina students do not score as well as their national counterparts.
- North Carolina students in each family income level are outscored nationally and in the selected states with the exception of Georgia and South Carolina.

Data Source: Table 15.

Figure 17. 1993 Total SAT Scores by Total Years of Study in Six Academic Subjects for Selected States and the Nation



Observations:

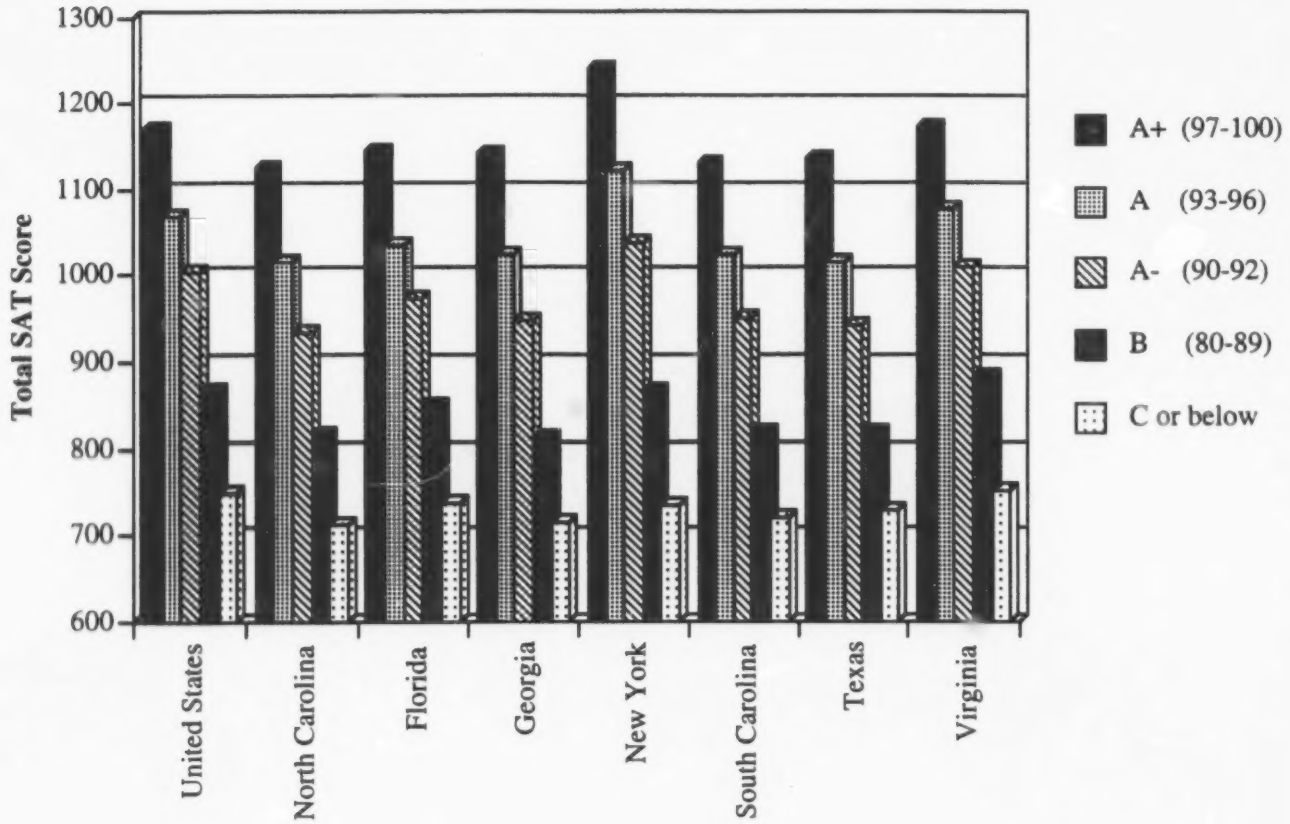
- As can be seen in Table 15, compared to SAT takers nationally, North Carolina students were less likely to have taken 20 or more academic courses (42 percent nationally compared to 33 percent in North Carolina). North Carolina test-takers do not compare favorably to students in Florida (43 percent), New York (56 percent) or Virginia (49 percent.)

- Even so, North Carolina students who do take 20 or more academic courses are outscored by their counterparts nationally and in the selected states, with the exception of Georgia and South Carolina.

- North Carolina students are also outscored nationally and in about half of the selected states for students with fewer than 20 academic courses.

Data Source: Table 15.

Figure 18. 1993 Total SAT Scores by High School Grade Point Average for Selected States and the Nation



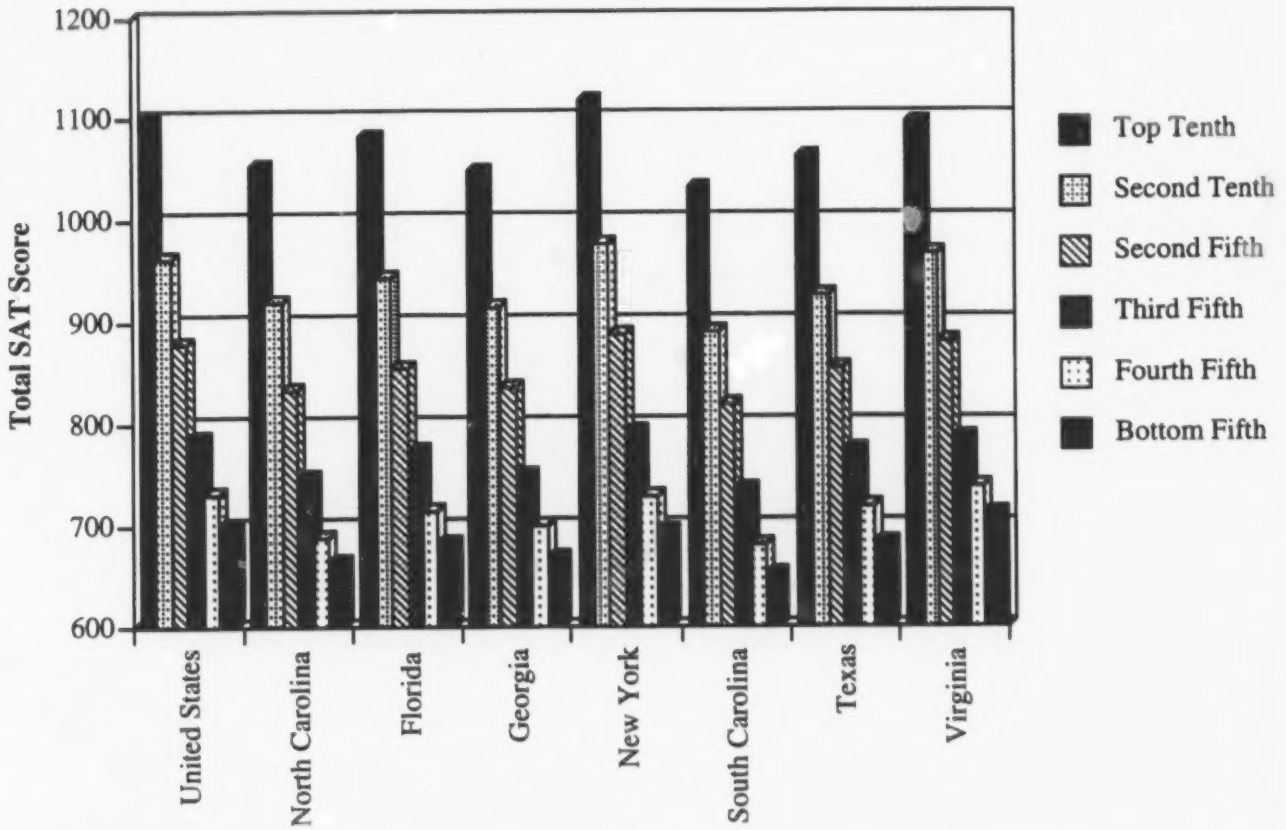
Observations:

- North Carolina test takers with self-reported high school grades of A+, A and A- scored lower than students nationally and in the states selected for comparison with the exception of South Carolina. This is generally true for North Carolina students with grades of B and C as well.

- Note from Table 15 that North Carolina test-takers are awarded grades in the A range more often than students nationally (35 percent compared to 32 percent nationally), and more often than each of the selected states with the exception of Texas, which awards 42 percent As.

Data Source: Table 15.

Figure 19. 1993 Total SAT Scores by High School Rank for Selected States and the Nation



Observations:

- North Carolina students taking the SAT report their relative high school ranks in the same proportions as students nationally, as seen in Table 15. However, North Carolina students in the top tenth of their class score 45 points lower than their counterparts nationally, and below their counterparts in the comparison states except those in Georgia and South Carolina. Texas students in the top tenth of their class score just a few points above North Carolina, while the other three score well above North Carolina (New York students' average score is 65 points higher than North Carolina's.)

Data Source: Table 15.

Comparing the Performance of

Individual School Systems

For the 120 Public Schools Systems and Two Special Public Schools

This section gives frequency distributions of system average scores, highlights successful school systems, and shows individual system results including number and percent tested, math and verbal scores and math and verbal yields. Caution must be exercised in interpreting scores for local systems, which vary considerably in percentage and types of students taking the SAT. For example, The College Board states, "Other factors variously related to performance on the SAT include academic courses studied in high school, family background, and education of parents. These factors and others of a less tangible nature could very well have a significant influence on average scores." (The College Board, Press Release, 1993.) The College Board strongly discourages the use of SAT scores to compare school systems or states. However, with some stability in participation rates, the review of scores over a number of years can reveal changes in the performance of specified groups of students who take the SAT.

Figure 20. Counties with Total SAT Scores above the State and National Averages
(City Systems and Special Schools Listed Below)

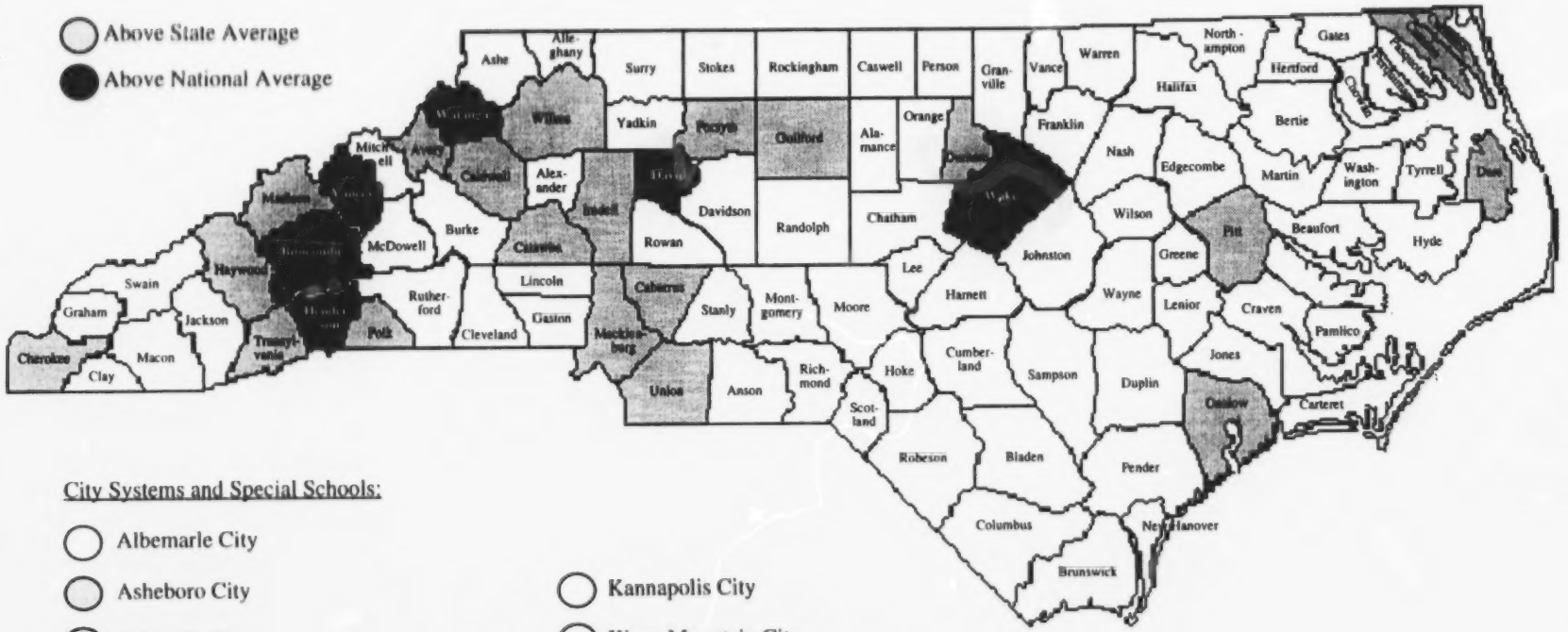


Figure 21. Distribution of North Carolina 1993 School System Average SAT Verbal Scores

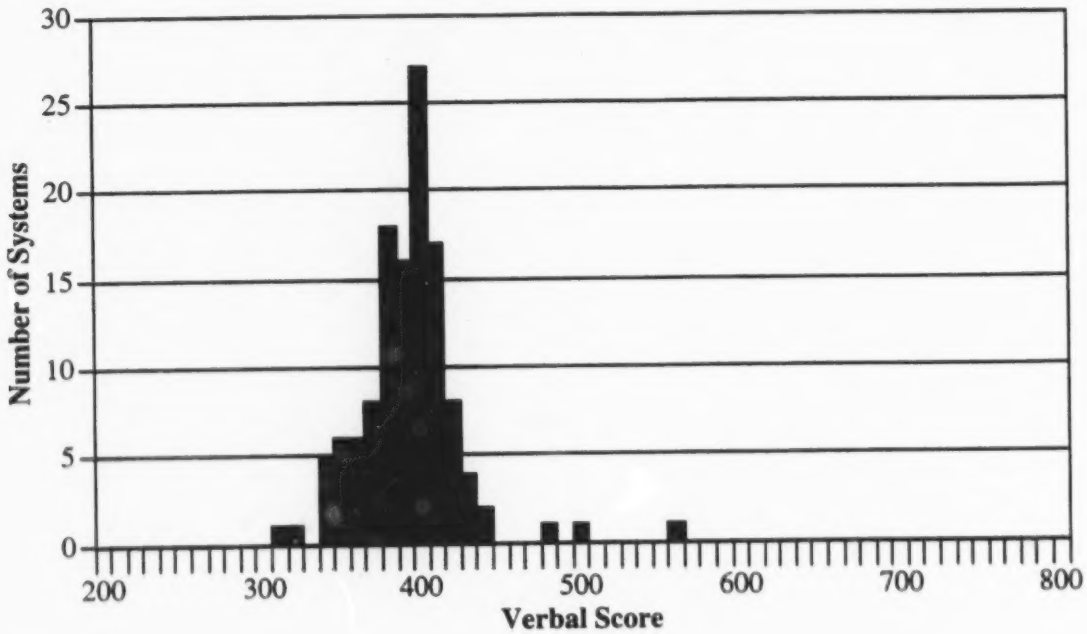
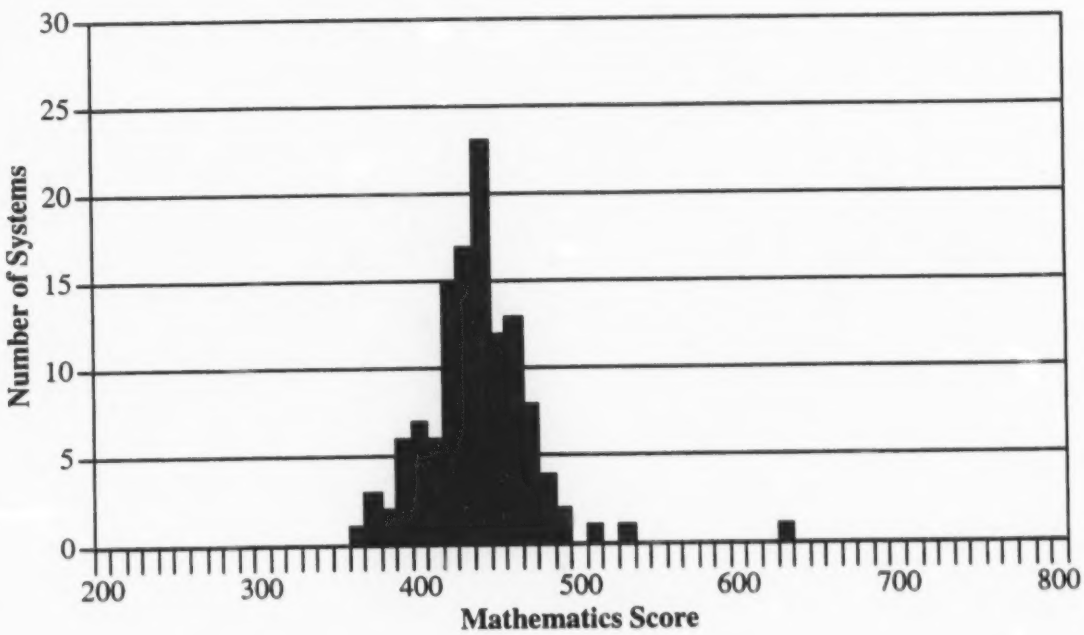


Figure 22. Distribution of North Carolina 1993 School System Average SAT Mathematics Scores



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Note: Data are from the 120 Public School Systems and 2 special schools.

Table 18. Outstanding School Systems

School Systems with the Highest 1993 SAT Scores

	Verbal	Mathematics	Total
1	Chapel Hill City	Chapel Hill City	Chapel Hill City
2	Watauga County	Wake County	Watauga County
3	Yancey County	Watauga County	Wake County
4	Hickory City	Roanoke Rapids City	Yancey County
5	Wake County	Yancey County	Hickory City
6	Buncombe County	Buncombe County	Buncombe County
7	Davie County	Henderson County	Roanoke Rapids City
8	Henderson County	Polk County	Henderson County
9	Asheville City	Hickory City	Davie County
10	Avery County	Davie County	Burlington City

School Systems with the Highest SAT Score Gains from 1992 to 1993

	Verbal	Mathematics	Total
1	Granville County	Asheboro City	Asheboro City
2	Lexington City	Cherokee County	Granville County
3	Hyde County	Hoke County	Polk County
4	Caswell County	Iredell County	Cherokee County
4	Polk County	Polk County	Lexington City
6	Pender County	Avery County	Iredell County
7	Alexander County	Granville County	Hoke County
7	Madison County	Madison County	Madison County
9	Pamlico County	Richmond County	Avery County
10	Currituck County	Northampton County	Richmond County
10	Harnett County	Sampson County	
10	Yancey County		

School Systems with the Highest 1993 SAT Participation Rates

1 Chapel Hill City
2 Wake County
3 Elkin City
4 Durham County
5 Asheboro City
6 Albemarle City
7 Mooresville City
8 Hickory City
9 Jackson County
10 Dare County

Table 18. (continued)

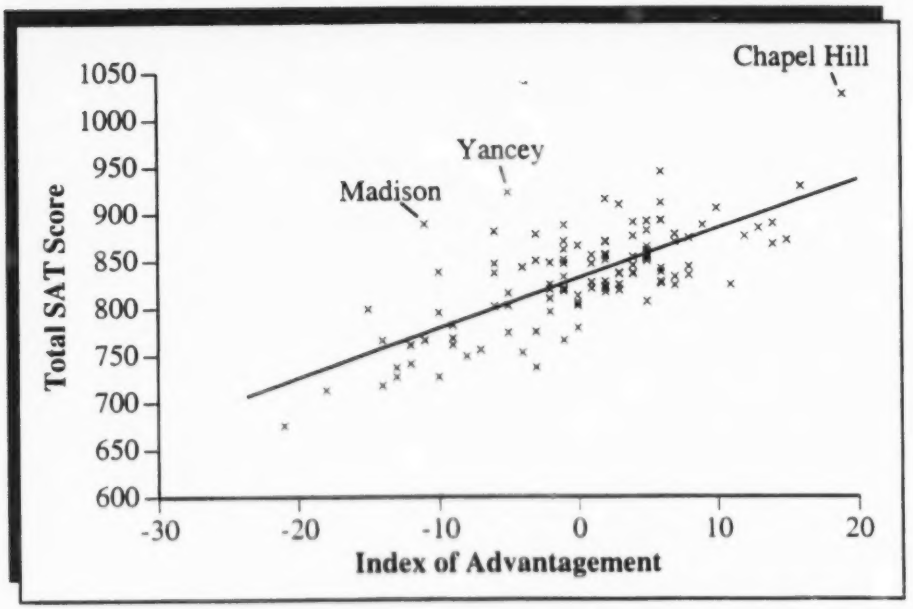
School Systems with the Highest 1993 SAT Yields

Verbal	Mathematics	Total
1 Chapel Hill City	1 Chapel Hill City	1 Chapel Hill City
2 Wake County	2 Wake County	2 Wake County
3 Elkin City	3 Elkin City	3 Elkin City
4 Watauga County	4 Asheboro City	4 Watauga County
5 Hickory City	5 Watauga County	5 Asheboro City
6 Durham County	6 Durham County	6 Durham County
7 Mooresville City	7 Hickory City	7 Hickory City
8 Asheboro City	8 Mooresville City	8 Mooresville City
9 Asheville City	9 Burlington City	9 Burlington City
10 Burlington City	10 Mecklenburg County	10 Mecklenburg County

School Systems with 4 consecutive years of improvement

Verbal	Mathematics	Participation
• Watauga County	• Alamance County	• Cumberland County
	• Cabarrus County	• Gates County
	• Duplin County	• Lee County
	• Edgecombe County	• Orange County
	• Onslow County	• Perquimans County
	• Polk County	• Rutherford County
	• Wake County	
	• Watauga County	

Figure 23. A Scatterplot of Index of Advantagement by Total SAT Score for 120 School Systems



Observations:

- The more advantaged systems had, on average, higher SAT scores.
- Based only on Index of Advantagement, three systems, Chapel Hill City, Yancey County and Madison County are scoring much higher than expected.

Note: Index of Advantagement is a measurement used in the annual North Carolina Report Card. The higher the index, the more advantaged the school system.

Data Source: not in text.

Table 19. 1993 SAT Verbal and Mathematics Scores and Yields for School Systems and Special Schools

LEA	TAC	School System	Number Tested	Percent Tested	Verbal Score	Math Score	Verbal Yield	Math Yield
10	6	Alamance County	358	57.8	391	444	18.4	23.5
11	6	Burlington City	232	64.8	418	475	23.5	29.7
20	2	Alexander County	138	48.1	394	430	15.6	18.4
30	2	Alleghany County	38	38.4	404	417	13.1	13.9
40	3	Anson County	146	45.1	340	387	10.6	14.0
50	2	Ashe County	109	50.9	401	449	17.0	21.1
60	2	Avery County	52	40.9	428	453	15.6	17.3
70	4	Beaufort County	208	44.3	379	424	13.2	16.5
80	4	Bertie County	86	38.6	370	396	10.9	12.6
90	5	Bladen County	147	50.3	360	393	13.4	16.2
100	5	Brunswick County	223	43.3	385	421	13.3	15.9
110	1	Buncombe County	752	56.2	432	480	21.7	26.2
111	1	Asheville City	132	63.8	428	460	24.2	27.7
120	2	Burke County	315	43.2	412	443	15.3	17.5
130	3	Cabarrus County	459	60.1	415	470	21.5	27.0
132	3	Kannapolis City	115	52.3	362	404	14.1	17.8
140	2	Caldwell County	227	43.4	414	457	15.5	18.6
150	4	Camden County	38	48.1	402	468	16.2	21.5
160	5	Carteret County	256	58.7	408	446	20.3	24.1
170	6	Caswell County	96	39.2	372	403	11.2	13.3
180	2	Catawba County	390	48.8	408	466	16.9	21.6
181	2	Hickory City	170	68.0	439	477	27.1	31.4
182	2	Newton-Conover City	94	53.1	402	463	17.9	23.2
190	6	Chatham County	153	48.7	407	435	16.8	19.1
200	1	Cherokee County	107	49.3	410	468	17.3	22.0
210	4	Chowan County	82	52.6	396	429	17.2	20.1
220	1	Clay County	32	42.7	398	439	14.1	17.0
230	3	Cleveland County	251	50.4	394	434	16.3	19.6
231	3	Kings Mountain City	105	43.8	389	449	13.8	18.1
232	3	Shelby City	118	61.5	408	454	21.3	26.1
240	5	Columbus County	160	36.0	357	404	9.4	12.3
241	5	Whiteville City	90	59.6	382	414	18.1	21.2
250	5	Craven County	384	53.6	410	446	18.8	22.0
260	5	Cumberland County	1539	59.8	384	429	18.4	22.8
270	4	Currituck County	59	47.2	404	467	16.0	21.0
280	4	Dare County	108	65.5	404	464	22.3	28.8
290	2	Davidson County	484	50.5	402	442	17.0	20.4
291	2	Lexington City	77	52.0	406	431	17.8	20.0
292	2	Thomasville City	64	59.8	375	420	17.5	21.9
300	2	Davie County	132	48.5	430	476	18.6	22.3
310	5	Duplin County	218	50.0	374	429	14.5	19.0
320	6	Durham County	1006	74.7	414	458	26.6	32.1
330	4	Edgecombe County	165	37.1	382	420	11.3	13.6
340	2	Forsyth County	1363	62.5	418	460	22.7	27.1
350	6	Franklin County	125	46.3	401	432	15.5	17.9
351	6	Franklinton City	33	41.8	354	402	10.7	14.0
360	3	Gaston County	821	50.9	391	446	16.2	20.8
370	4	Gates County	59	53.2	349	430	13.2	20.4
380	1	Graham County	51	63.0	389	436	19.8	24.8

Table 19. (continued)

LEA	TAC	School System	Number Tested	Percent Tested	Verbal Score	Math Score	Verbal Yield	Math Yield
390	6	Granville County	141	38.8	405	442	13.3	15.7
400	5	Greene County	56	30.1	341	408	7.1	10.4
410	6	Guilford County	2010	64.9	409	456	22.6	27.7
420	4	Halifax County	113	34.2	314	362	6.5	9.2
421	4	Roanoke Rapids City	64	41.3	422	488	15.3	19.8
422	4	Weldon City	23	33.3	343	370	7.9	9.4
430	6	Harnett County	270	43.8	405	446	15.0	18.0
440	1	Haywood County	225	49.9	407	454	17.2	21.1
450	1	Henderson County	321	53.7	428	480	20.4	25.0
460	4	Hertford County	115	45.6	350	377	11.4	13.4
470	3	Hoke County	94	34.7	372	427	9.9	13.1
480	4	Hyde County	21	33.9	391	445	10.8	13.8
490	2	Iredell County	342	47.2	414	462	16.8	20.6
491	2	Mooresville City	106	69.7	423	469	25.9	31.3
500	1	Jackson County	133	65.8	397	453	21.6	27.7
510	6	Johnston County	451	49.0	390	446	15.5	20.1
520	5	Jones County	26	29.5	364	404	8.1	10.0
530	6	Lee County	216	58.9	396	423	19.2	21.9
540	5	Lenoir County	297	48.5	379	431	14.5	18.6
550	3	Lincoln County	211	43.7	402	449	14.7	18.1
560	1	Macon County	126	63.3	410	437	22.2	25.0
570	1	Madison County	66	43.1	425	464	16.2	19.0
580	4	Martin County	161	56.1	360	377	15.0	16.6
590	1	McDowell County	140	42.0	392	426	13.4	15.8
600	3	Mecklenburg County	2648	64.1	416	472	23.0	29.1
610	1	Mitchell County	54	45.4	422	426	16.8	17.1
620	3	Montgomery County	95	42.2	382	434	12.8	16.5
630	3	Moore County	234	43.7	402	443	14.7	17.7
640	6	Nash County	458	49.2	391	436	15.7	19.4
		NC School of Science and Math	335		569	630		
		NC School of the Arts	75		502	513		
650	5	New Hanover County	726	63.5	403	450	21.5	26.5
660	4	Northampton County	99	55.0	326	392	11.6	17.6
670	5	Onslow County	414	44.9	402	458	15.2	19.3
680	6	Orange County	168	60.2	401	432	20.1	23.2
681	6	Chapel Hill City	341	87.7	489	539	42.3	49.5
690	5	Pamlico County	58	48.7	399	426	16.2	18.3
700	4	Pasquotank County	157	58.8	389	432	18.6	22.7
710	5	Pender County	121	45.7	384	419	14.0	16.7
720	4	Perquimans County	51	50.0	383	419	15.2	18.2
730	6	Person County	157	52.9	380	443	15.9	21.4
740	4	Pitt County	542	55.9	407	463	19.3	24.5
750	1	Polk County	48	52.2	413	478	18.6	24.2
760	6	Randolph County	265	35.7	410	447	12.5	14.7
761	6	Asheboro City	125	73.5	410	472	25.7	33.3
770	3	Richmond County	180	40.7	399	444	13.5	16.5
780	5	Robeson County	575	51.2	344	393	12.3	16.5
790	6	Rockingham County	345	42.5	387	445	13.2	17.4
800	3	Rowan County	513	53.8	385	441	16.6	21.6

Table 19. (continued)

LEA	TAC	School System	Number Tested	Percent Tested	Verbal Score	Math Score	Verbal Yield	Math Yield
810	1	Rutherford County	234	42.5	393	427	13.6	16.1
820	5	Sampson County	213	47.1	364	410	12.9	16.4
821	5	Clinton City	58	39.7	385	432	12.2	15.4
830	3	Scotland County	198	52.0	355	411	13.4	18.2
840	3	Stanly County	171	49.9	389	436	15.7	19.6
841	3	Albemarle City	104	69.8	387	434	21.7	27.3
850	2	Stokes County	141	39.4	387	441	12.3	15.8
860	2	Surry County	199	47.2	408	447	16.4	19.4
861	2	Elkin City	47	75.8	420	470	27.8	34.2
862	2	Mount Airy City	78	63.4	401	456	21.2	27.1
870	1	Swain County	55	50.0	413	425	17.8	18.8
880	1	Transylvania County	152	64.1	413	463	22.8	28.1
890	4	Tyrrell County	27	57.4	373	409	16.5	20.0
900	3	Union County	481	55.4	408	452	19.2	23.3
910	6	Vance County	223	60.9	368	393	17.1	19.6
920	6	Wake County	2819	75.8	432	498	29.3	37.7
930	6	Warren County	87	47.5	357	384	12.4	14.6
940	4	Washington County	90	50.6	355	398	13.1	16.7
950	2	Watauga County	142	65.4	449	496	27.2	32.3
960	5	Wayne County	480	46.8	381	426	14.1	17.6
970	2	Wilkes County	234	42.4	419	447	15.5	17.5
980	6	Wilson County	282	47.9	397	450	15.8	20.0
990	2	Yadkin County	124	37.8	408	446	13.1	15.5
995	1	Yancey County	63	36.8	440	483	14.7	17.4